



Florida **HEALTH NOTES**

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LEGISLATIVE ISSUE

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Florida **HEALTH NOTES**

ESTABLISHED 1890

A REPORT TO THE STATE ON ITS PUBLIC HEALTH NEEDS

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A REPORT TO THE STATE ON ITS PUBLIC HEALTH NEEDS

Every citizen of Florida is, we believe, vitally interested in the health of all the people in Florida. They are interested not only because they know health is important but because without health many other good things of life such as economic well-being are impossible. It is our belief that this State cannot prosper unless the maximum effort is made towards protecting the health of each and every citizen.

It is further believed that citizens of Florida not only hold the State Board of Health to be primarily responsible for the health of its people, but also, for making proper recommendations to the people of the State about changes that need to be made in its legal authority to perform its work, as well as recommendations concerning the amount of funds necessary to carry it on.

In furtherance of this line of thought, this issue of Health Notes will set forth in outline form all proposals to be made to the next session of the Legislature so that, not only each legislator, but every citizen of Florida, can see what is asked and what is proposed. The Governor of Florida has demonstrated his interest in the health of his people by recommending that the State's appropriation be doubled. In his recent radio report to the State he said:

"It is estimated by competent public health authorities that a complete and effective health program costs about \$2 per capita. It is not necessary for the State to appropriate the full \$2 but a complete service would require a State appropriation of the difference between the \$2 and the funds available from Federal, city and county sources. That appropriation would increase the State's allotment for health purposes from about \$800,000 annually to more than \$1,500,000. That step would double the amount the State is now contributing to public health but, when the advantages are weighed, it strikes me as being a conservative investment. It would put us in line with some of the more progressive States in this field, giving us a cancer control program, providing more help for the county health units, more efficient machinery for combatting venereal diseases and more adequate and effective sanitary engineering. It would expand our public health program all along the line and would save the lives of many Florida citizens. It strikes me that the program is worthwhile and is worth the cost. I believe the vast majority of Floridians will agree with that judgment."

As an agency under the Executive Department of the State the purpose of this issue is to detail our proposals for the expenditures of any increased funds which might be appropriated.

Evidence that the people of the State approve an expansion of the health program is indicated by the following quotations from some of the State's leading newspapers:

The Miami Herald, September 12, 1946, "Humane Policy."

"Every prospective member of the 1947 legislature should give most serious consideration to the public health recommendations made by Governor Caldwell in his monthly report, as of this week, to the people of Florida.

"The Governor enunciated a humane program. He formulated a public policy designed to cope with a grave problem of the State.

"It was not a politically inspired message. In fact, the governor was frank in stating facts that some of us don't care to hear about or state and which certain misguided Floridians would hide, in the fond delusion that concealment will serve as much as open examination looking toward a cure.

"Neither was the governor's policy dictated by a visionary excursion into "state medicine." Let not the rabid opponents of "socialized medicine" so accuse Governor Caldwell. He dealt candidly with our failure to care adequately for the public health. He marshaled his facts to prove our deplorable inefficiencies. He called upon the people of Florida in their individual and the commonwealth's interest to supply the funds to correct conditions.

"Governor Caldwell is quite conservative in recommending that the State should allot \$1,500,000 to public health. It was his belief that this appropriation, coupled with available federal, county and city funds, would provide a \$2 per capita health program, putting us abreast of some of the most progressive states in this field.

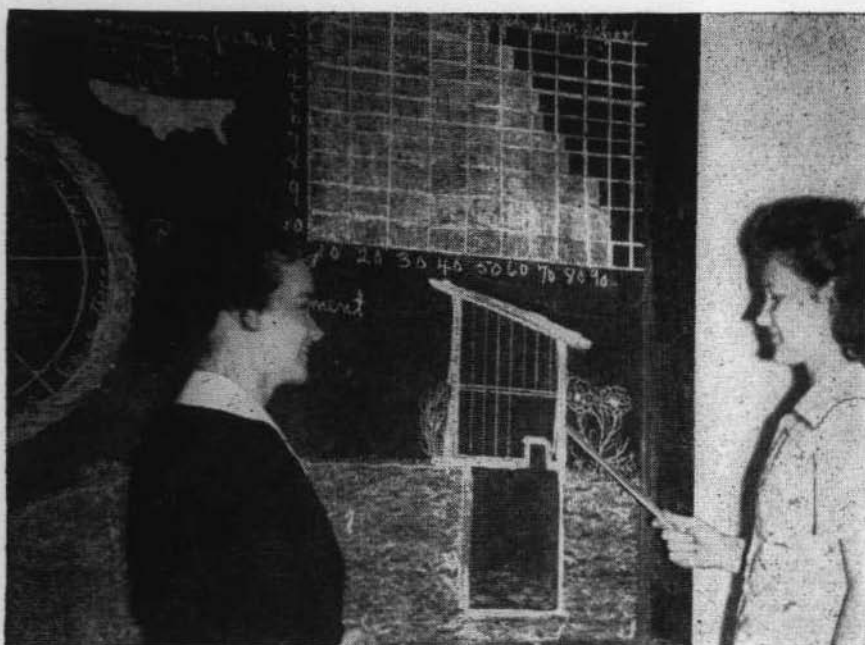
"The objective is of imperative urgency. Our own personal selfish interests dictate that we solidly support the Governor's leadership. It should, however, be our pleasure to accept the program for the higher and nobler purposes set out by the Governor: "Carelessness, neglect, inertia are as destructive as machine guns. We must not allow people to die because we lack the energy, the initiative or the loyalty to do something about it.

"The doing rests with our legislators. Let us see that they do it."

The Jacksonville Journal, "Florida: A Sick State."

"Governor Caldwell presented a stinging indictment of the State of Florida for its crass neglect of public health. His list of charges were backed up by cold, hard statistics.

"Governor Caldwell also stated clearly why these horrible things are true of Florida; simply because we have not laid out the money for an adequate state public health program. He has tossed that proposition squarely into the laps of the members of the 1947 Legislature without fear of the political consequences.



In Baker County the nurse, sanitarian and health officer give the school children "something to work with" in the local hookworm problem. In a special project we see the students' speculations about hookworm on the blackboard. A sophomore is explaining to public health nurse Mrs. Wolfe and the class just how the parasites can best be controlled—through proper sanitation. Boys of the school have been carrying on their own privy building project, and many "Chick Sales" have been built through their persistent efforts. (Photo by RSA).

"A State is in no better condition than its people. If we are proud of being the champions in syphilis and hookworm and other similar attainments, then we can save that money. If we think that that kind of a disease-ridden, germ-in-fested, filth-covered land is good enough for Floridians to live in, then we can spend the money on something more important. But if the people in Florida are the most important thing in Florida, then we'd better shell out to clean up. And fast."

Tallahassee Democrat, October 18, 1946.

"In his broadcast last September 10, Governor Caldwell called attention to the appalling fact that 40 per cent of our school children are victims of hookworm.

"The report of the United States Public Health Service covering the year 1945 lists Florida as having the highest incidence rate of all 48 States. Of the 16,194 cases reported we accounted for the astounding total of 5,317 cases. This is almost one-third of all the cases reported throughout the nation.

"We in Florida, who pride ourselves in being members of one of the most advanced States in the South, can well be ashamed of our poor health responsibilities, and our apparent disregard of the easily applicable preventative measures available."

Miami Daily News, "Needed Step."

"In recommending that the State of Florida allot a million and a half dollars for public health purposes, Governor Caldwell has taken a much needed step in the direction of improving the over-all health conditions of the State.

"When offering his recommendations, Governor Caldwell pointed out some facts which are not at all complimentary to the State with a reputation for beauty, sunshine and health.

"Final action on the governor's proposal rests with the new legislature. It will be up to these representatives to determine whether or not the health of the State warrants the expenditure of this small amount of money. It would seem that the only objection which could possibly be taken to Governor Caldwell's program would be on the grounds that it is not extensive enough and that \$1,050,000 is only a drop in the bucket as compared to the actual need."

Daytona Beach Evening News, "Caldwell and Public Health."

"Governor Caldwell, being more foremindful than far too many of his constituents, is looking ahead, now, to the 1947 session of the Legislature and sorting out some of the things that need to be done by the lawmakers.

"And well at the top of the list is public health. More than once Caldwell has bluntly said that Florida has lagged behind minimum national standards in its public health program.

"Caldwell tells why the additional money is needed, what it should be used for.

"Caldwell wants the additional health money to pay for a real cancer control program; give more financial aid to County Health units; expand and improve the system of combatting venereal disease—which in the long run would save the taxpayers a great deal of money and trouble besides lifting a big load from the State hospital, penal institutions and law enforcement agencies.

"These are the Governor's objectives in public health. What is important is that he is talking about an expanded public health program now, and the money to finance it, more than six months ahead of the Legislature's next session.

"In doing this the Governor is setting an example that every community in the State and every civic group in each community should follow. On the day the Legislature's gavels sound for a new session is no time to think of public needs too long neglected, of measures too long left undone. Now is the time."

Stuart News, October 17, 1946, "Caldwell on Stream Pollution."

"Governor Millard Caldwell, in his annual message on the State's health warned:

"Stream pollution alone is threatening to reduce Florida's attractiveness to visitors and unless corrected will eventually turn the otherwise attractive areas into forgotten lands. Inasmuch as our income depends so heavily upon the bathing and fishing facilities used by visitors, we must not be so shortsighted as to allow our beautiful streams and water-



Here are a group of Jaycees who fared forth for chest x-rays when the unit was operating in Daytona Beach not too long ago. Pinning a "I have been x-rayed" tag on one gent is Mrs. Amy Cason, former executive secretary of the Volusia County TB Association. (Photo by RSA).

ways to be converted into filthy sewers menacing to the health of the people.'

"He is eminently correct—and his message should register here. It may not sound nice to say it but it is brutally true that the whiff of sewer gas is becoming more pungent than all the orange blossoms in Stuart."

Palm Beach Post, "Caldwell Speaks Out Again."

"Whatever faults Governor Millard Caldwell may possess, complacency is not among them.



When mobile x-ray unit No. One arrived in Quincy to begin a county-wide chest x-ray survey there was a "yardful" awaiting their turn. Over 9,000 persons were x-rayed during the three weeks' campaign. Surveys are usually conducted in cooperation with the local Tuberculosis & Health Association. (Photo by RSA).

"As a result of his refusal to be satisfied with things as they are, there is hope that the people of Florida will become less complacent too, concerning matters that are vitally related to the State's progress and welfare.

"Gov. Caldwell has a theory that the public should be informed about conditions that exist, whether good or bad. There is no other way to bring about the correction of the bad ones, he believes.

"He has already barred to public view ugly facts about some of our State institutions. He set up committees to probe into the State's educational and taxing systems and suggest needed reforms. He has never ceased warning the people of the danger of a do-nothing policy in regard to water control.



Public Health Nurse Ross of Duval County believes in explaining the "whys and wherefores" to children. From the interested audience it would appear that her theory is right—that personal attention is impressive and effective when doing health screening in schools. She has finished giving the youngsters the Snellon eye test, but goes into detail about routine of the check and the importance of proper eye protection. (Photo by RSA).

"And now he has come forth with a general criticism of Florida's neglect of the health of its people.

"He wants Florida to take its place along side other progressive States in that respect by establishing a cancer control program, providing more help for the county health units, more efficient machinery for combatting venereal diseases, and more adequate and effective sanitary engineering, better hookworm and malaria control, increased facilities for dental care.

"And he insists "we must not be so short-sighted as to allow our beautiful streams and waterways to be converted into filthy sewers menacing the health of our people for the lack of sanitary engineers."

"Of course, all these things will cost money but the governor thinks \$1,500,000 a year would not be too much for the State of Florida to spend to protect the health of its residents and visitors."

Miami Herald, November 29, 1946, "But Progressive."

"Not the least of Governor Caldwell's progressive thinking was the recent announcement that he would ask the coming Legislature to appropriate \$1,500,000 for necessary expansion of public health control in Florida. It is significant that the Governor considered this proposal "a conservative investment."

* * * * *

"Only one State in the Southeast spends less per capita than Florida for public health control—a total of 35 cents per person when national authorities agree that at least \$2 per capita from the State is required by an acceptable health program.

"The Legislature should approve this program. If we are to fight hookworm, tuberculosis, venereal disease, cancer, provide wider immunization of children, better dental health and a stronger educational program for maternal and child care, Florida must have the soundly financed and state-wide public health projects envisioned in the Governor's program.

"There is nothing starry-eyed in Governor Caldwell's proposal for our schools, our public health, the expansion and direction of state institutions.

"He is going after no left-wing theories. He has studied his state and its needs and mapped out a plan indicated to meet them. That's being progressive, not reactionary."

Public health programs in the past have been devoted to a large extent toward the control of communicable diseases. The State as a whole in a united effort of all concerned has reduced deaths from communicable diseases to such an extent that they now constitute only about three per cent of the total deaths. For instance:

3,739

FLORIDA LIVES SAVED FROM COMMUNICABLE DISEASES IN 1945

DEATH RATE FROM COMMUNICABLE DISEASES

1925

Population	1,236,625
Actual deaths	3,529
Rate	279.3

DEATH RATE FROM COMMUNICABLE DISEASES

1945

Population	2,266,455
Actual deaths	2,591
Rate	115.2

IF the 1925 death rate had been 115.2 (1945 rate) instead of 279.3, total deaths from communicable diseases would have been 1,425 OR 2,104 LIVES would have been SAVED in 1925.

AND

IF the 1945 death rate had been 279.3 (1925 rate) instead of 115.2, deaths would have been 6,330. Therefore 3,739 LIVES were saved in 1945 because of the reduction in rate.

HEALTH PROGRAMS WILL BENEFIT FROM PROPOSED INCREASE OF BUDGET

The sum of \$386,000 is asked for county health departments because most public health programs are carried on almost entirely on a local basis and by local health department staffs. It is felt that by strengthening the county health departments in the State that the following programs will be markedly enhanced: **Tuberculosis Control, Venereal Disease Control, Maternal and Child Health, Dental Health, Health of School Children, Sanitation, Hookworm Control** and many others.

Aside from these needs, the State Board of Health has been faced with a financial problem this past year in that a large number of new counties have opened health departments and many more will undoubtedly decide to inaugurate health services within the next two years. These new counties have as much right to State assistance as counties which have had their health departments functioning for the past ten years. For this reason it is essential that more funds for matching county funds be provided or else there will naturally be less money for all counties.

Two years ago \$64,000 annually was appropriated the State Board of Health for district health work. These districts were formed of counties which did not have local health departments and were set up because of the necessity for making some form of public health control available to every citizen of the State. There were four districts, the Southeastern, comprising Brevard, Osceola, Indian River, St. Lucie, Martin and Palm Beach counties. The Southwestern district with Sarasota, Hardee, Manatee, DeSoto, Charlotte, Lee, Hendry and Collier counties. Central district with St. Johns, Flagler, Putnam, Marion, Citrus, Hernando and Pasco counties, and the Northern District comprising Hamilton, Columbia and Gilchrist counties.

Because only sixteen counties, Gilchrist, St. Johns, Marion, Citrus, Hernando, Pasco, Manatee, Hardee, Lee, Hendry, Collier, Palm Beach, Martin, St. Lucie, Okeechobee and Indian River, remain without local health departments today, the request for funds for district health work is being pared to only \$25,000 as compared to the original \$64,000. In the above cases only a nucleus of public health protection is available and **no money is provided by the counties**, for this coverage.



School health is an important phase of any county health department. Here we see the youngsters at Arlington School, Duval County, carefully washing their hands before lunch. Checking the lavatories, lighting facilities and lunch rooms is the work of a local sanitarian. (Photo by RSA).

CANCER

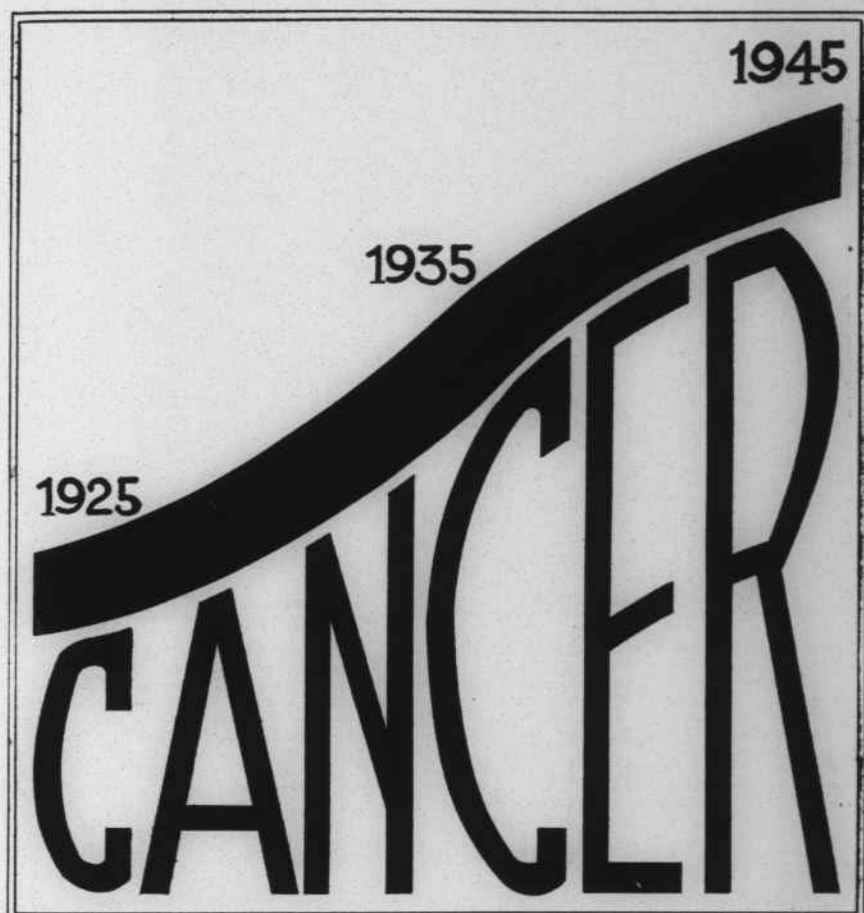
The sum of \$200,000 is requested for a state-wide cancer control program. The need for such a program need not be embellished. The fact that 2,302 persons died in 1945 from cancer is sufficient evidence of a need of something to be done. Authorities believe that the death rate from cancer can be cut tremendously by early diagnosis and treatment.

The Board is also asking the Legislature to pass a Bill allowing it to carry on this proposed work which will entail an educational program to impress upon the public the necessity for quick check-ups when symptoms occur. Also, to establish a series of clinics for such check-ups, immediately afterwards referring the patient to his or her private physician or to designate a treatment center in case of indigents.

The condensed Bill reads as follows:

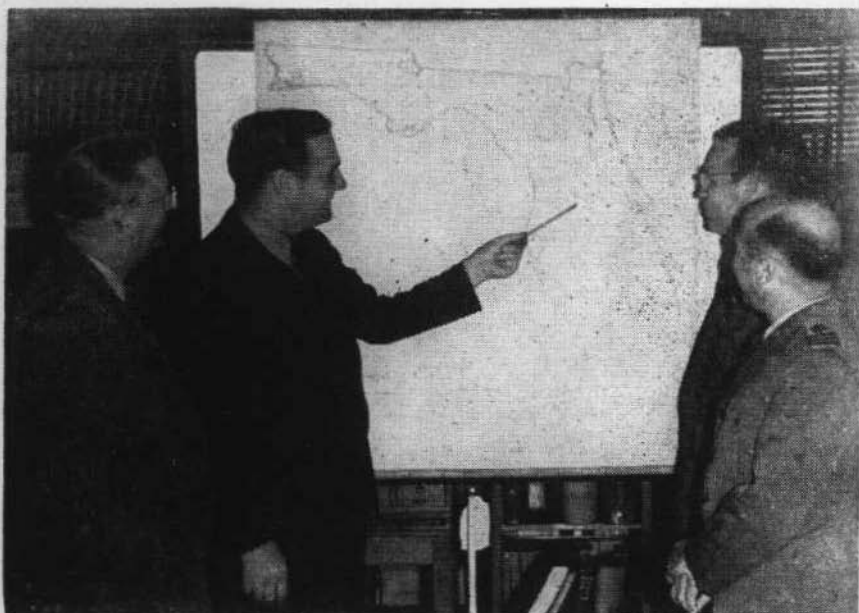
"TO AUTHORIZE THE FLORIDA STATE BOARD OF HEALTH TO ESTABLISH A STANDARD FOR THE ORGANIZATION, EQUIPMENT AND CONDUCT OF CANCER UNITS OR DEPARTMENTS IN GENERAL HOSPITALS OR IN PRIVATE CLINICS IN THIS STATE; TO CONDUCT AN EDUCATIONAL CAMPAIGN FOR THE CONTROL OF CANCER, AND TO PROVIDE A PLAN FOR THE CARE AND TREATMENT OF INDIGENT PERSONS SUFFERING FROM CANCER."

Of this proposal Governor Caldwell has said: "The State Board of Health could initiate a cancer finding survey for \$200,000—less than 10 cents per capita. If the cancer case can be identified early enough it could, almost without exception, be cured. A courageous approach to the problem might cut cancer mortality in Florida in half and result in the saving of more than 1,000 lives each year. The actual saving of these lives would not be fully apparent to the layman immediately because the average cancer case runs for years. But many could be saved from the beginning and more each year if the effort is followed up. I believe it may be a conservative statement that it is worth 10 cents to the people of Florida to save these lives. I would be interested in your reactions."



For the past 20 years there has been a seriously steady rise in deaths from cancer in Florida. We show above in the unusual graph, the sharp ascendancy and give you in the following outline the total deaths from cancer for that period as well as death rates per 100,000 population in the State.

	1925		1930		1935		1940		1945	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Cancer (All Forms).....	776	62.8	1,032	69.7	1,452	89.6	1,829	95.7	2,302	101.6



Every facility for the industrial hygiene survey was recruited last winter when the State Board of Health and the Florida Industrial Commission launched their cooperative study of occupational diseases and ways and means for their control and prevention. The study is completed and the State Board of Health is now asking for an appropriation to carry on a preventive program, an indicative outcome of the survey. Here we have three head men of the State Board of Health and an industrial hygiene authority of the U. S. Public Health Service studying an industrial map of Florida. They are, left to right: Dr. R. F. Sondag, director, Preventive Diseases; Dr. Wilson T. Sowder, State Health Officer; David B. Lee, director, Bureau of Sanitary Engineering, and J. I. Bloomfield of the USPHS. (Photo by RSA).

INDUSTRIAL HYGIENE

The sum of \$27,000 is asked to carry on an industrial hygiene program. Along with this appropriation is also asked the passage of a Bill designed:

"TO AUTHORIZE THE FLORIDA STATE BOARD OF HEALTH TO CREATE AND MAINTAIN AN ADMINISTRATIVE UNIT OF INDUSTRIAL HYGIENE: TO AUTHORIZE THE INVESTIGATION OF PLACES OF EMPLOYMENT AND STUDY CONDITIONS WHICH MIGHT BE RESPONSIBLE FOR ILL HEALTH OF THE INDUSTRIAL WORKER: TO REQUIRE THE REPORTING OF INDUSTRIAL DISEASE: TO PROVIDE PENALTIES FOR THE VIOLATION OF THE PROVISIONS OF THIS ACT: PROVIDING FOR APPROPRIATIONS FOR THE PURPOSE OF CARRYING OUT THE PROVISIONS OF THIS ACT AND REPEALING ALL LAWS IN CONFLICT HEREWITH."

This planning is an outcome of the last Legislature when it amended the Workmen's Compensation Act in order to include occupational diseases. One of the sections of this act directed the Workmen's Compensation Division of the Florida Industrial Commission, in cooperation with the Florida State Board of Health, to make a study of occupational diseases and of ways and means for their control and prevention. An Industrial Hygiene survey of industrial establishments in Florida was undertaken cooperatively by the Industrial Commission and the State Board of Health during the first six months of 1946 with the technical assistance of the U. S. Public Health Service. Sufficient information was collected to determine the extent of occupational disease hazards in the State.

All this came about as a result of the wartime successes which proved the effectiveness of industrial control in reducing illness and death to a phenomenally low level in such dangerous industries as munition plants. No more than ten per cent of all American industrial workers, however, received the protective benefits of industrial health measures in 1945. The health of the industrial worker is a matter of concern not only to industry, but to the community at large. The elements of a good industrial health program aim to achieve and maintain three goals:

1. A safe and healthful working environment.
2. A healthful community environment.
3. Healthy, well adjusted men and women engaged in industrial production.

Governor Caldwell has said of this proposed project: "The Industrial Commission sees to it that the family of a man killed on the job is given compensation up to the amount of \$5,000. That figure by no means measures the value of a human life . . . from any standpoint. It is a poor man indeed who is not worth more than \$5,000 to society in economic productiveness alone.

"If the industrial hygiene program saves only five lives a year, it will adequately pay its way on that basis and justify the \$27,000 set up in the budget for the service."



This is a picture we always like to use. In all of the picture files at the State Board of Health there is no photo of two more handsomely healthy appearing youngsters than these two boys from Manatee County. Miss Fitzgerald, county nurse, and Dr. Emily Gates, formerly with the Maternal and Child Health Bureau, are checking the boys for possible nutritional defects. (Photo by RSA).



This expectant mother is killing two birds with one stone. She has brought her little girl to the well baby clinic, and she herself is making a routine report to the nurse about diet, exercise, clothing, and so forth. She also attends the prenatal class conducted by the Pinellas County Health Department every week. (Photo by RSA).

VENEREAL DISEASE

The sum of \$22,000 increase is asked for prevention of venereal disease. Venereal diseases are still among Florida's foremost health problems. The amount asked would by no means solve the problem were it not for the fact that the State Board of Health is receiving **substantial federal aid**. The total cost of a venereal disease control program is also to a large extent carried on by county health departments and local appropriation. The finding of cases and their referral to the Rapid Treatment Center is done by county health departments.

And here again we quote Governor Caldwell: "It costs a little money to find and cure a case of syphilis but it costs many times that sum to maintain a syphilitic patient with general paresis at the State Hospital at Chattahoochee. It is now estimated that the expense of identifying a case of syphilis through mass tests is between \$10 and \$11 and that it costs about \$37 to cure that case at the rapid treatment center. In 1945 the Health Department found 16,000 cases and treated over 12,000. There is no way of knowing how many of the 12,000 cases cured by the Health Department would have, without treatment, ended their days at State expense at Chattahoochee. We know that the number of general paresis cases at the State Hospital ranges between 14 and 16 per cent of the patient population."

SANITARY ENGINEERING

The sum of \$50,000 is asked for the expansion of the activities of the Bureau of Sanitary Engineering. These funds will be used to employ well qualified sanitary engineers.

America's supply of pure water is its most vitally important natural resource. In Florida approximately 90 per cent of our 2,250,000 persons use ground water for domestic consumption. Less than one-half of these individuals obtain water which is not treated in any way, therefore, over 1,000,000 Florida citizens consume untreated ground water. The major portion of Florida's ground water which is utilized for domestic consumption is obtained from limestone formation known as the Ocala formation.

Water moving in limestone usually makes its way along certain crevices which are known as caverns when enlarged. Enlargement is due to solution of the limestone by water containing carbonic acid. Because of the presence of numerous open cracks or by virtue of the natural solubility of the rock, very large open chambers called domes are formed where surface water enters the rock. As solution progresses, some part of the cavern or dome roofs become weak and collapse, forming sink holes.

At present, drainage wells and sink holes are being used in Florida for the disposal of storm water or surface drainage, industrial wastes and process water of various types and, most serious of all domestic sewage. Such practices are incompatible with modern public health practice or standards.

The concept that all ground waters are safe to drink without treatment should be dispelled from the public mind. Indiscriminate consumption of ground water in the State of Florida is fraught with danger. Adequate treatment facilities must be provided as a part of every public water supply in the State, even though in some instances it may be necessary that this consist only of chlorination.

There is a growing need for public health engineering services in the State in connection with preventing the pollution of water by sewage and industrial waste. Such pollution of our streams, lakes, tidal and underground waters naturally affects adversely their usefulness for recreational purposes besides being a menace to health. IN A SINGLE INSTANCE THE POLLUTION OF BAY WATER BY SEWAGE AND IN-

DUSTRIAL WASTES PREVENTS THE DEVELOPMENT OF A FOUR MILLION DOLLAR SHELLFISH INDUSTRY.

The rapid expansion of the citrus canning industry has created a growing problem in wastes treatment and disposal. The wastes from slaughter houses presents problems. Should the oil industry develop in the State as some anticipate this will add materially to the problem. While the State Board of Health has no wish to insist on uneconomic waste treatment systems it believes that by conscientious study and effort it can discharge its legal responsibilities in these matters to the satisfaction of all concerned. Additional personnel however, are needed before many of these duties, which ARE REQUIRED BY LAW, can even be undertaken.



Every county health department in Florida is putting particular emphasis on its Negro health problems. And it is too often true that most health problems with the exception of hookworm are more pronounced among the Negroes. The picture shows a health project in a grade school in Tampa in which special note of sanitation is being made. (Photo by RSA).



In this picture a group of Negro health committee members of the Alachua County Health Department are studying the controls of an x-ray machine. (Photo by RSA).



In this picture we have a group of Leon County midwives being shown the proper technique of weighing a new baby. The young woman instructor is one of Florida's five certified nurse midwives. Nearly 500 midwives are registered with the State Board of Health. (Photo by RSA).

NUTRITION PROGRAM

The amount of \$28,140 is asked for a nutrition program. The State Board of Health has always been concerned with the problem of nutrition in the State. It is doubtful, however, if proper nutrition as a factor in maintaining health has been given the consideration it deserved until very recent years. Physicians connected with the State Board of Health and those in private practice have for years credited hookworm infestation as the major cause of anemia and general physical disability often seen among rural children of school age. That such a condition exists and that it is a major problem has been conclusively shown.

But besides the problem of anemia there are also findings which suggest other dietary deficiencies, particularly vitamin deficiencies. This is a rather startling observation in a State which prides itself on its sunshine and citrus fruits. Dietary studies have shown however, that many of our Florida children do not even have citrus fruits included in their diets.

It appears, therefore, that there is a pressing need for investigations covering the entire nutritional field in Florida. Such investigations are already under way and are currently being carried out by funds granted by several philanthropic organizations. These funds, however, will not be continued after the present fiscal year.

DENTAL HEALTH

An increase of \$12,060 is asked for the Division of Dental Health. This is an important program because of the four major factors which contribute to poor dental health in Florida: 1, lack of dental education; 2, inadequate dental facilities; 3, lack of ability to pay for dental services by a large number of persons; 4, inadequate provision of dental services for dental indigents.

The above statement is supported by the results of surveys conducted by the State Board of Health indicating that:

a. Between 80 and 90 per cent of the elementary school population are victims of dental disease.

b. Only approximately 20 per cent of the elementary school population are definitely able to afford dental service compared to 35 per cent definitely unable to pay. Forty-five (45) per cent were classed doubtful in their ability to pay.

c. Ten of Florida's 67 counties have no dentists or dental facilities whatsoever; thirteen of them have only one dentist each; the majority of the dentists are concentrated in the cities—leaving large rural areas to overcome the ill effects of dental disease as best they can.

Florida's elementary school enrollment (1943-44) record was 237,657. Naturally it is much larger now, but by taking that same figure and using our survey measuring rod, at least 200,000 of them are afflicted with dental disease and of that number only approximately 40,000 were able, through their own resources, to afford the dental care necessary to correct or alleviate the situation.

The State Board of Health has for years carried on a dental health program but this has never at any time even approached adequacy. More and more of the larger county health departments are, however, including a full-time or part-time dentist in their budgets, and the State Board of Health is preparing to put a second mobile dental unit in the field. It is hoped that within a few years we will be able to have the entire State covered so that at least the worst cases of dental defects among school children can be corrected. Not the least of the benefits of a dental health program is the education of parents and children relative to the care and preservation of their teeth. Good teeth are of course necessary for good general health.



In the State Board of Health's dental work by way of the dentmobile over the State volunteer agencies are often co-operative in helping register the youngsters, particularly where local health department personnel is overworked or inadequate in number. Here we have Mrs. Martin, executive secretary of the Highlands County TB Association registering a young lady who isn't a bit afraid of her coming session with the dentist. In the educational work of the dental trailer one of the big features is to try to alleviate any possible fear in the youngster of visiting the dentist. (Photo by RSA).

PEST MOSQUITO CONTROL WORK

Sixty thousand dollars is asked for a new program for attacking the pest mosquito problem. This program will involve surveys, investigations, research, and consultation services. Many areas of the State already have set up mosquito control districts to combat pest mosquitoes. Under present laws the State Board of Health is directed to furnish technical advice and consultation not only to those districts but to cities and counties which wish to do mosquito control work.

It is hoped that this new program may open the way for the alleviation if not the solution of one of Florida's foremost health and economic problems. It is believed that Florida cannot afford the mosquito problem. Some estimate that land valuation in some areas would be increased at least 25 per cent were it not for the depredation of this obnoxious insect.



The above picture shows the lake before work was started.



This picture shows the boat in operation with some of the area cut.

On this page we show three pictures which tell an outstanding story in malaria control. The lake is at Lake City and has been choked with water hyacinths for years. It has also harbored a high index of malaria carrying mosquitoes. All efforts to eliminate the growth had failed until the Malaria Control Bureau borrowed a special rotary bladed contraption mounted on a boat from the U. S. Engineers and chopped the vegetation into tiny pieces, which soon sank to the bottom of the lake.



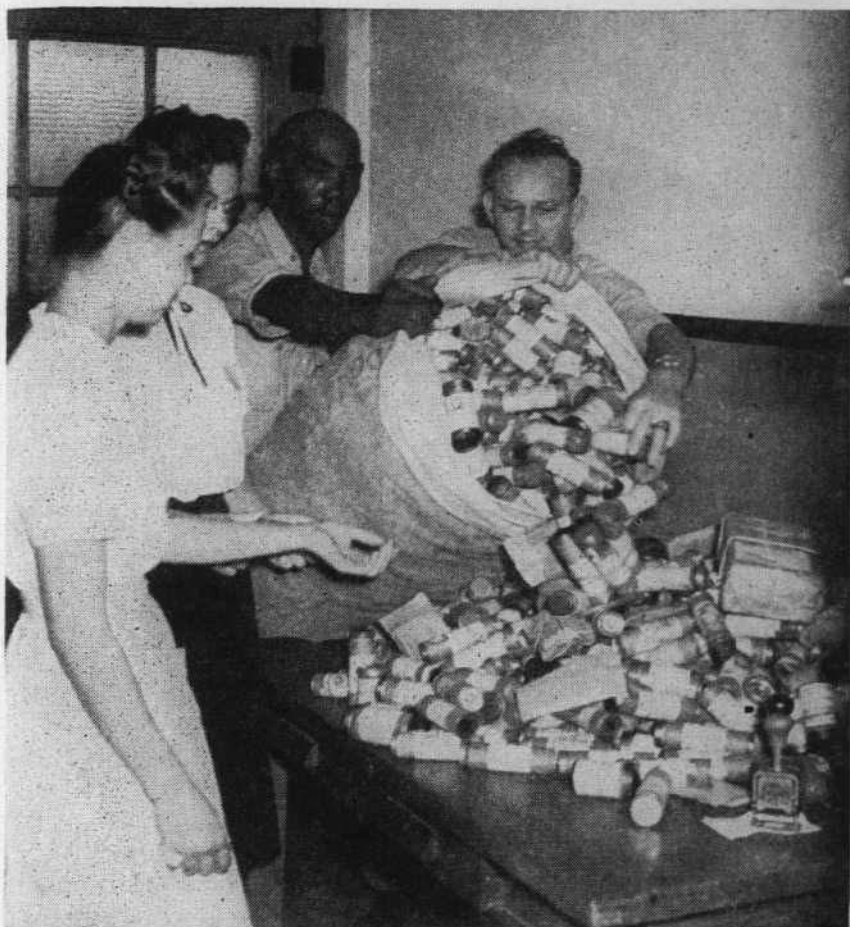
And this picture presents an absolutely clean lake. All pictures show the same area of the lake, with mosquito harborage controlled for the first time in years. (Photo by RSA).

LABORATORIES

A sum of \$45,000 is asked for the extension of laboratory facilities in this State. About \$25,000 of this amount would be used for the establishment of an additional branch laboratory in the city of Orlando. At the present it is extremely difficult, because of transportation problems, to get specimens examined in central Florida because the nearest laboratories are in Tampa and Jacksonville. The additional funds will be used for employment of technicians and professional personnel which has long been needed.

The laboratories (the central laboratory in Jacksonville with branches in Pensacola, Tallahassee, Tampa and Miami) perform **each year** over 1,000,000 tests which at present commercial rates would cost \$5,000,000 and yet the current budget amounts to only about \$275,000.

The importance of the public health laboratories cannot be over-emphasized. There are few citizens in Florida who have not had the benefit of one test or other from this branch of the State Board of Health. The monetary value of the laboratories is small compared to the finding of just one pregnant woman with a positive blood test. She is treated for an unsuspected case of syphilis and a healthy, rather than a diseased infant is born. A water supply is examined and found to be unsatisfactory—and an epidemic is averted, and so it goes.



Mail time is a busy time in the Central Laboratory. Thousands of specimens are received each morning and dispatched immediately to the specific departments where highly trained technicians are poised, ready to begin their work of identifying the various diseases. The above picture gives some idea of the bulk of specimens which are received on the first mail each morning. (Photo by RSA).

COMMERCIAL LABORATORY PERSONNEL STANDARDS

The State Board of Health would endorse a properly drawn Bill intended to regulate the establishment and operation of clinical laboratories. It is known that at present some privately operated laboratories are staffed by inadequately trained and inexperienced workers. These workers perform tests involving the happiness, health and even the life of individuals. For the protection of standards of practice in the "healing arts" an effective program for the examination and licensing of laboratory technicians and for the operation of clinical laboratories is needed.

BIRTH CERTIFICATES

The State Board of Health will seek a change in the basic law regulating the registration of births of adopted children.

Under this law the birth certificate form for adopted children would be identical with the standard birth certificate forms, except for an inconspicuous reference to the section of our statutes providing for the establishment of the certificate for an adopted child.

This change is recommended by the State Welfare Board.

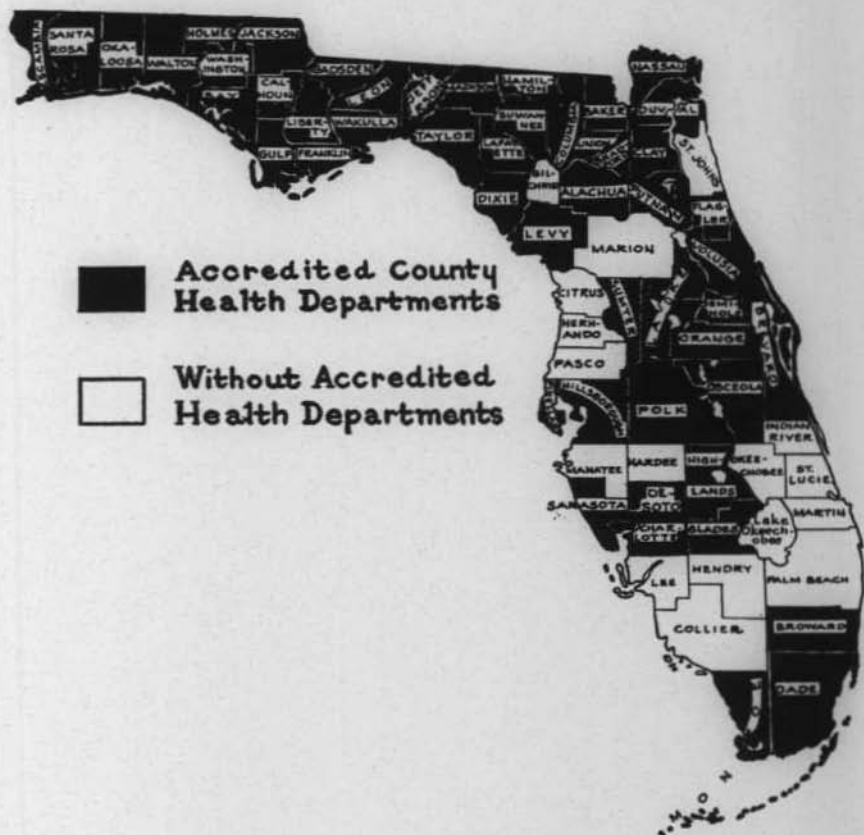
STATE BOARD OF HEALTH SUPPORT TO PROPOSED BILLS SANITARY DISTRICTS

The State Board of Health will endorse a properly drawn state-wide permissible enabling Act to provide for the establishment of sanitary (utility) districts and to cover the financing and the administration of same without the necessity of the passage of a special Act in each specific area where such is needed.

REGULATION AND REGISTRATION OF HOSPITALS

The State Board of Health would endorse a properly worded Bill providing for the regulating and registration of hospitals, sanatoria, rest homes and similar institutions. At the present time it is known that many so-called hospitals, sanitoriums, and rest homes do not deserve the name and are an imposition upon an unsuspecting public.

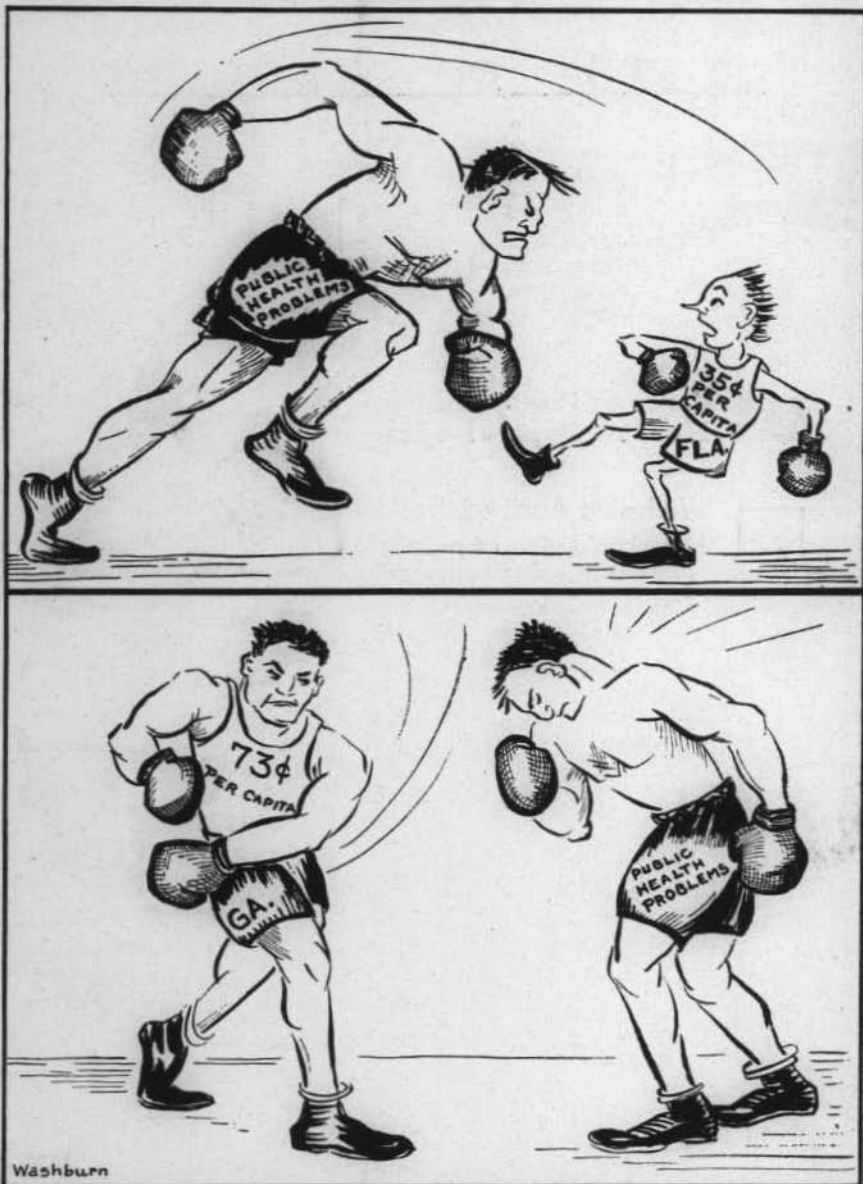
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WOULD YOU SEND A BOY TO DO A MAN-SIZE JOB?



Only one other state in the South allots less money for public health than Florida with her 35 cents per capita. Our neighboring state shown above slugging stubbornly away at his opponent isn't the only one which has recognized its obligations and voted reasonably necessary funds for public health protection.



Florida **HEALTH NOTES**

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VENEREAL DISEASE CONTROL

The State Board of Health

Hon. Millard F. Caldwell
Governor of Florida

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Robert G. Carter,
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Please address all Health Notes correspondence to Ruth Stuart Allen, Editor.

Florida HEALTH NOTES

ESTABLISHED 1890

VENEREAL DISEASE CONTROL IN FLORIDA

By **R. F. SONDAG, M. D.**, *Director*
Bureau of Preventable Diseases

A year ago, in this publication, the following statement was made: "Now that the War is over, everyone should hold firmly to the great public health and law enforcement gains made during the War and pledge greater confidence and determination in an all-out effort to stamp out venereal diseases." One of the great public health mile posts to stamp out syphilis was the enactment in the 1945 Legislature of the Premarital and Prenatal laws, which became effective on October 1, 1945. Prior to 1945, those unfortunate individuals who married with venereal diseases and the diseased children of these marriages, suffered the grave effects of neglect. The 1945 Legislature, therefore, enacted laws which offer some ray of hope among those individuals who approach the altar unknowingly infected with syphilis, and made it possible for the first time by legislation to detect syphilis in expectant mothers and thereby prevent the birth of diseased children. All over the civilized world, the cry has always been **WOMEN AND CHILDREN FIRST**. Prior to the enactment of the Premarital and Prenatal laws, mothers and children were left to their doom—to become maimed, blind, paralyzed, insane, bedridden, or otherwise rendered helpless. These progressive laws are two in the armamentarium of health organizations hard at work fighting venereal diseases.

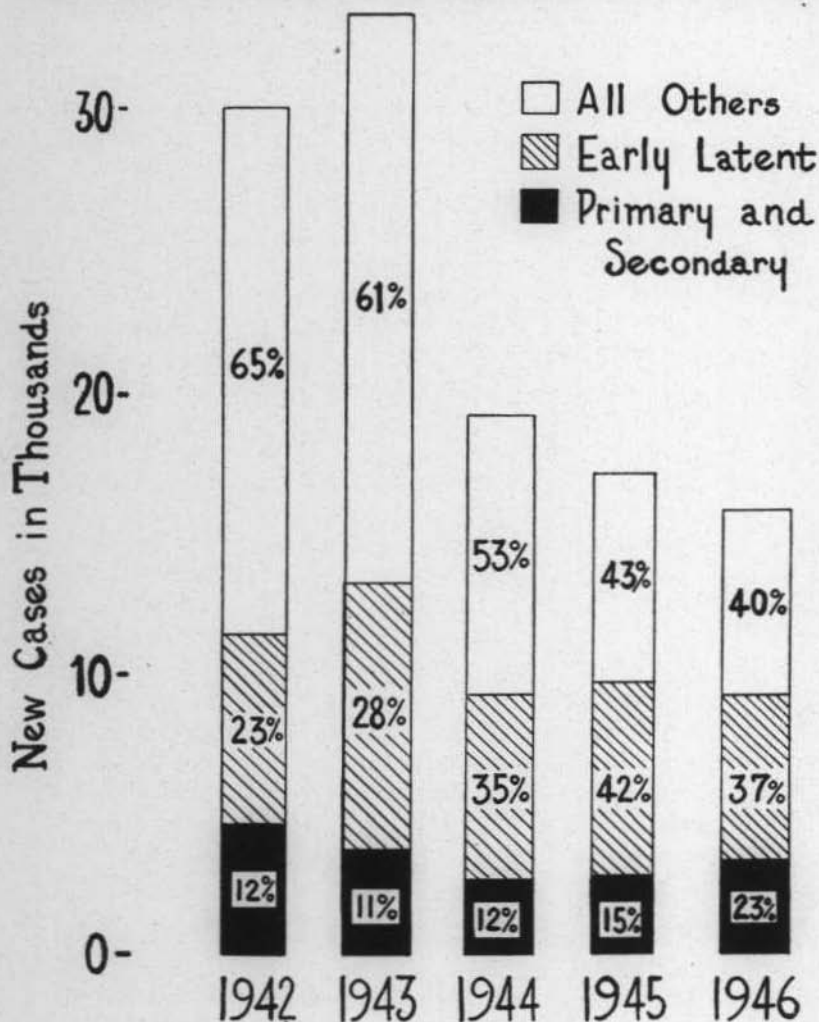
Blood tests of candidates for marriage licenses and of pregnant women are shown in Tables 1, 2, and 3. Since the laws have only been effective for the past fifteen months, 1946 is the first complete year on which results can be shown. Table 1 shows that 42,407 blood tests were made in compliance with the Premarital Blood Test Law, and of these 2,825 were positive. This means that in the absence of such a law, 2,825 individuals would have approached marriage blissfully ignorant that they were infected with syphilis. Over 2,800 cases of syphilis were discovered in 1946 by means of this law, and these individuals, after having been apprised of their infection, were allowed to marry, pro-

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vided adequate treatment had been given or the disease rendered non-infectious.

During the 1943 Legislature, effective laws were enacted to lend support to fearless law enforcing agencies. Law enforcement representatives, therefore, have the tools by which they can correct and prevent conditions leading to a high venereal disease rate. Prevention must be as definite a police function as detection and apprehension. WE HAD TEAMWORK DURING THE WAR AND IT BROUGHT RESULTS—LET'S NOT DISCARD IT NOW.

TOTAL SYPHILIS REPORTED BY YEARS



In Table 2, the results of the Prenatal Law reveal a total of 37,878 tests taken on expectant mothers, of which 1,938 were positive. In the absence of a Prenatal Law, over 1,900 expectant mothers could have gone to maturity unknowingly infected with syphilis and could have given birth to dead babies or babies infected with syphilis. The Prenatal Law is the most effective tool devised to aid in the elimination of congenital syphilis. That some progress has been made is reflected in the number of cases of congenital syphilis reported during the past few years. In 1943, cases congenital syphilis reported to the State Board of Health totaled 753, and in 1946, the first year of the Prenatal Law, 447 cases were brought to our attention. Every known method of follow-up is being utilized to make the Prenatal Law the most effective weapon in the elimination of congenital syphilis. As we progress with this effective weapon, congenital syphilis in the State of Florida should become a rare condition.

THE PREMARITAL AND PRENATAL LAWS HAVE ALREADY PROVEN A HUGE SUCCESS OVER THE FIRST FIFTEEN MONTHS OF OPERATION AND ADDITIONAL BENEFICIAL RESULTS WILL BE REFLECTED IN YEARS TO COME BY HAPPIER MARRIAGES AND STRONG, HEALTHY CHILDREN.

In this issue a year ago, it was also stated that "failure to hold the gains made in the control of venereal diseases would almost surely place Florida back on the unenviable list of states with high venereal disease rates." This should never happen—BUT IT IS HAPPENING. During war-time, a fine cooperative job achieved impressive gains in the fight against venereal diseases. The motivating factor of patriotism lent impetus to the cooperative effort, but as so many have predicted, we are not only beginning to slip back—we have slipped! The vital factor in the retreat from progress is the slackening of public interest and support. Since the war ended law enforcement against prostitution has relaxed. There is every reason to believe that those who control the prostitution racket have already developed plans to renew their activities. This movement must be resisted by every decent citizen in Florida because it carries with it disease and corruption. Law enforcement responsibility to a community is greater than that of any other agency and deserves the backing of every citizen in the correction and prevention of conditions leading to delinquency and disease. Proper discharge of police obligations and responsibilities requires dealing with the individual law violator, whose conduct menaces public health and safety, and close observation of places and conditions which may be regarded as breeding places for crime and delinquency.

TABLE 1.—NUMBER AND RESULTS OF SEROLOGIC TESTS FOR SYPHILIS PERFORMED BY STATE LABORATORIES IN COMPLIANCE WITH
PREMARITAL BLOOD TEST LAW, 1946

	NEGATIVE				DOUBTFUL				POSITIVE				TOTAL				Total																	
	Male		Female		Male		Female		Male		Female		Male		Female																			
	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored	White	Colored																		
	Number	Percents	Number	Percents	Number	Percents	Number	Percents	Number	Percents	Number	Percents	Number	Percents	Number	Percents																		
	14,465	97.50	4,444	80.75	15,392	97.62	4,873	77.32	59	.4	129	2.34	73	.46	147	2.33	311	2.1	930	16.90	302	1.91	1,282	20.34	14,835	35	5,503	13	15,767	37	6,302	15	42,407	100

TABLE 2.—NUMBER AND RESULTS OF SEROLOGIC TESTS FOR SYPHILIS PERFORMED BY STATE LABORATORIES IN COMPLIANCE WITH
PRENATAL BLOOD TEST LAW, 1946

Number Percents	NEGATIVE		DOUBTFUL		POSITIVE		TOTAL		Total
	White	Colored	White	Colored	White	Colored	White	Colored	
	26,799 97.91	8,919 84.87	58 .21	164 1.56	512 1.88	1,426 13.57	27,369 72.70	10,509 27.30	

Prevention is still in the horse and buggy stage as compared to the streamlined advancements made in diagnosis and treatment of venereal diseases, yet prevention remains the key to successful control of venereal diseases. Venereal diseases are definitely preventable, but prevention is a broad task. Among other things, prevention means an understanding that conduct, and not medication, lies at the core of the venereal disease problem. Prevention means steady, vigorous citizen support of the work of law enforcement officials in repressing prostitution. Prevention means knowledge on the part of each and every person, young and old, of the dangers of venereal diseases, the need to avoid exposure, and to seek treatment promptly if infection occurs.

A splendid beginning has been made, but syphilis and gonorrhea remain formidable public health problems. Relaxation in control efforts reflects itself immediately in rising infections. That this is true is evidenced by a 43% increase in primary and secondary syphilis in 1946 as compared to 1945. As great as this increase might seem, it is estimated that many more cases of primary and secondary syphilis fail to come to the attention of private physicians and public health officials. These are the individuals who promote the spread of syphilis and gonorrhea and hinder the effective control of these diseases.

Greater attention and more trained personnel must be devoted to case finding activities. Every infectious case must be found and brought under medical care. Rapid treatment must be made available within reach of all who need it everywhere. Rapid treatment, which renders syphilis non-infectious, will go far toward wiping out syphilis if new cases can be found and brought under treatment fast enough. During 1946, 79% of the primary and secondary cases of syphilis discovered in Florida were referred to the rapid treatment center for intensive therapy. Tables 4 and 5 show the number of cases admitted to the rapid treatment centers by stage of disease, race and sex. During the year more cases could have been treated in the rapid treatment centers, had not this phase of the venereal disease control program met with some uncontrollable circumstances.

In April, 1946, a major fire destroyed half of the hospital at Ocala, necessitating a curtailment in admissions to that center. After this catastrophe, negotiations were started to acquire a new rapid treatment center, which finally culminated in the acquisition of the Ernest Hinds Hospital Ship, which was opened as a rapid treatment center on the St. Johns River in Jacksonville on July 1, 1946. This facility, too, had its limitations and it was

necessary to restrict admissions on many occasions because of inadequate space.

As this goes to press, the State Board of Health is still searching for a suitable, modern facility to provide adequate treatment for all those in need of intensive therapy.

TABLE 3.—NUMBER AND RESULTS OF SEROLOGIC TESTS FOR SYPHILIS BY STATE LABORATORIES IN COMPLIANCE WITH PREMARITAL AND PRENATAL LAWS BY RACE AND SEX, 1946

	NEGATIVE		DOUBTFUL		POSITIVE		TOTAL	
	Number	%	Number	%	Number	%	Number	%
Male	18,909	93.0	188	.9	1,241	6.1	20,338	100
Female	55,983	93.3	442	.8	3,522	5.9	59,947	100
White	56,656	97.7	190	.4	1,125	1.9	57,971	100
Colored	18,236	81.7	440	2.0	3,638	16.3	22,314	100
Total	74,892	93.3	630	.8	4,763	5.9	80,285	100

TABLE 4.—ADMISSIONS AND READMISSIONS TO FLORIDA RAPID TREATMENT CENTERS, ACCORDING TO DISEASE, STAGE OF INFECTION, RACE AND SEX, 1946

CENTER	DISEASE AND STAGE OF INFECTION														RACE		SEX		
	Primary and Secondary Syphilis	Early Latent Syphilis	Late and Late Latent Syphilis	Pregnancies	Congenital Syphilis	Central Nervous System Syphilis	Total Syphilis	Gonorrhea Alone	Other V. D.	Diagnostic and Post Treatment Observation	No Venereal Disease	Syphilis Readmissions	Gonorrhea Readmissions	Total Readmissions	Total Admissions and Readmissions	White	Non-White	Male	Female
Ocala Rapid Treatment Center	1073	1693	240	55	137	197	3395	116	58	109	160	99	9	128	3966	536	3430	2076	1890
Jacksonville Rapid Treatment Center	326	172	100	25	14	56	693	8	5	51	14	66	0	66	837	395	442	473	364
Sub-Total Percents	1399 29.4	1865 38.8	340 7	80 1.6	151 3.2	253 5.3	4088 85.1	124 2.6	63 1.3	160 3.3	174 3.6	165 3.4	9 .2	194 4.0	4803 100	931 19.0	3872 81.0	2549 53.0	2254 37.0
Ernest Hinds Treatment Center	1470	1799	327	155	172	364	4287	58	97	168	219	152	3	157	4984	932	4061	2413	2571
Percents	29.5	36.1	6.6	3.1	3.4	7.3	86.0	1.1	1.9	3.3	4.4	3.1	.1	3.2	100	19.0	81.0	48.0	52
TOTAL Percents	2869 29.3	3664 37.4	667 6.8	235 2.4	323 3.3	617 6.4	8375 85.6	182 1.9	160 1.6	328 3.3	393 4.0	337 3.3	12 .1	351 3.6	9787 100	1854 19.0	7933 81.0	4962 51.0	4825 49

Ocala and Jacksonville RTCs closed June 30, 1946
Ernest Hinds Treatment Center opened at Jacksonville July 1, 1946

TABLE 5.—NUMBER OF CASES OF SYPHILIS REPORTED, BY STAGE OF INFECTION, WITH NUMBER AND PERCENT TREATED IN THE RAPID CENTERS, 1946

Stage of Syphilis	Total Cases Reported	Treated in RTC	Percent Treated in RTC
Primary and Secondary	3651	2868	79%
Early Latent	6003	3664	61%
Late and Late Latent	3463	667	19%
Pregnancies	347	235	68%
Congenital	447	323	72%
Central Nervous System	704	617	88%
Total Syphilis	16135	8375	52%

TABLE 6.—NUMBER OF VENEREAL DISEASE CASES REPORTED IN FLORIDA, BY DISEASE AND YEAR, 1942-1946

Year	Syphilis	Gonorrhea	Chancroid	Granuloma Inguinale	Lymphopathia Venereum
1942	30,104	10,165	453	135	124
1943	33,540	16,295	844	251	254
1944	19,087	14,351	535	217	248
1945	16,546	18,088	722	244	197
1946	16,067	18,548	818	257	176

(Out of State Cases Excluded)

TABLE 7.—NUMBER OF CASES OF SYPHILIS AND GONORRHEA REPORTED BY COUNTY—FLORIDA—1942-1946

COUNTY	1942		1943		1944		1945		1946	
	Syp.	Gon.	Syp.	Gon.	Syp.	Gon.	Syp.	Gon.	Syp.	Gon.
Alachua	965	105	784	118	348	65	307	187	439	266
Baker	76	20	45	10	31	25	30	13	30	33
Bay	412	255	553	422	437	454	323	868	187	169
Bradford	182	97	199	86	193	97	134	114	78	99
Brevard	168	2	419	91	73	33	120	40	168	28
Broward	773	110	742	231	479	258	349	210	383	341
Calhoun	26	2	48	5	9	1	6	1	7	6
Charlotte	170	8	65	33	15	17	5	15	15	5
Citrus	17	0	170	11	13	7	16	30	24	47
Clay Ex.	62	61	108	48	155	66	40	59	65	101
Camp Blanding	329	1478	316	1875	69	91	143	42	26	3
Collier	190	1	35	14	23	3	18	41	30	38
Columbia Ex.	59	8	714	24	88	31	64	48	137	161
Govt. Hospital			69	2	17	0				
Dade	4229	522	4459	1349	2588	2016	1724	2444	1627	2908
DeSoto	264	14	166	47	53	50	43	41	44	61
Dixie	74	1	215	0	14	5	27	39	23	50
Duval	3516	2115	6214	3032	3909	1826	2470	2387	2688	2814
Naval Air Base	31	428	36	503	43	529	62	706	1	123
Escambia	661	514	792	1127	812	1487	641	1934	684	1993
Flagler	79	11	94	8	108	55	173	70	98	85
Franklin	96	30	117	158	142	675	85	184	37	73
Gadsden Ex.	199	56	299	40	120	53	348	296	409	375
State Hospital	172	0	183	1	159	0	155	2	179	0
Gilchrist	42	0	4	1	1	0	4	5	21	13
Glades	110	7	18	8	32	6	29	3	26	6
Gulf	148	16	143	13	84	13	46	21	78	14
Hamilton	77	50	3	0	3	6	14	11	25	17
Hardee	95	17	36	5	34	10	16	9	20	0
Hendry	205	6	181	57	135	24	240	25	183	20
Hernando	53	0	142	2	9	5	3	11	34	5
Highlands	344	35	299	260	183	280	107	153	178	105
Hillsborough	2437	803	2920	1430	1417	1815	1205	2176	947	2330
Holmes	18	1	51	0	51	14	30	5	38	15
Indian River	210	11	279	16	68	22	153	40	114	31
Jackson	237	109	211	133	113	164	50	169	99	197
Jefferson	432	42	201	64	78	47	79	101	87	70
Lafayette	7	1	14	0	4	1	2	0	4	3
Lake	611	97	380	95	201	96	199	121	355	264
Lee	650	108	286	39	149	41	101	127	126	178
Leon	659	1111	450	687	359	1128	309	1123	368	761
Levy	301	15	152	62	10	3	65	26	93	32
Liberty	4	0	7	1	1	1	1	3	0	1
Madison	235	13	476	38	16	4	118	40	105	64
Manatee	503	35	218	187	178	84	184	241	157	322
Marion	359	27	1026	77	263	111	242	399	293	662
Martin	66	2	95	8	7	0	83	19	40	5
Monroe	147	80	308	171	142	220	117	228	78	209
Nassau	309	59	201	126	114	102	90	36	72	50
Okaloosa	140	24	171	248	61	224	42	164	28	19
Okeechobee	2	2	72	0	36	12	18	16	14	2
Orange Ex.	1023	629	850	846	580	313	781	415	721	528
Fla. T. B. Sanat.			2	1	2	0				
Osceola	132	3	113	9	6	4	16	6	36	6
Palm Beach	1245	258	1274	335	2324	355	2069	814	1398	780
Pasco	114	2	175	4	55	3	31	5	83	13
Pinellas	1111	277	927	596	370	319	268	279	386	504
Polk	690	34	1135	245	526	161	552	336	553	474
Putnam	401	6	320	39	82	37	193	67	232	25
Saint Johns	264	10	213	36	137	44	222	71	132	46
Saint Lucie	127	14	339	105	165	42	160	115	213	179
Santa Rosa	58	27	55	18	33	88	13	38	20	31
Sarasota	570	83	181	46	139	53	91	78	60	77
Seminole	1169	104	589	210	335	197	546	175	301	192
Sumter	227	14	190	165	85	6	93	24	105	66
Suwannee	259	9	377	10	9	4	34	17	113	48
Taylor	301	75	127	58	62	110	26	17	48	6
Union	24	1	20	1	11	7	15	12	31	18
State Prison			238	5	89	2	144	0	143	0
Volusia	944	83	660	260	310	126	350	460	459	435
Wakulla	85	15	111	200	16	21	15	11	14	25
Walton	164	12	46	45	58	69	55	48	32	9
Washington	45	0	141	22	47	55	42	57	25	12
Quarantine Hosps.			271	616						

Grand Total || 30104 || 10165 || 33542 || 16925 || 19087 || 14351 || 16546 || 18083 || 16067 || 18548

(Out of State Excluded)

TABLE 8.—DISTRIBUTION OF DRUGS AS TO SOURCE AND KIND FURNISHED FOR 1944-1946

DRUGS	Distributed to Private Physicians			Distributed to Clinics, Hospitals and Others			Total Distributed		
	1944	1945	1946	1944	1945	1946	1944	1945	1946
Maparsen (In doses)	36,270	13,080	14,688	398,820	234,680	68,205	435,090	247,760	82,893
Neoparsphenamine (In doses)	3,260	1,340	1,012	9,095	2,165	2,104	12,355	3,505	3,116
Sulpharsphenamine (In doses)	155	5	55	2,760	1,045	541	2,915	1,050	596
Tryparsamide (In doses)	940	380	204	10,550	4,780	2,094	11,490	5,160	2,296
Bismuth (In cc's)	37,470	14,040	17,240	517,720	264,790	139,480	555,190	278,830	156,720
Sulfathiazole (In grams)	4,000	1,000	7,500	1,055,000	199,190	201,452	1,059,000	200,190	208,952
Distilled water (In cc's)	318,600	144,300	103,000	3,048,900	2,783,200	1,432,600	3,367,500	2,927,500	1,535,606
*Penicillin (100,000 unit vials)	0	747	1,184	10,920	107,862	82,954	10,920	108,609	84,138
Penicillin (200,000 unit vials)	0	0	269	0	0	9,693	0	0	9,962
Penicillin (500,000 unit vials)	0	0	0	0	0	3,110	0	0	3,110
Penicillin in Oil (In cc's)	0	0	410	0	0	12,350	0	0	12,350

*Penicillin distributed—1946 totaled 156,170,000 oxford units.

AND AGE GROUPS, BY COUNTIES AND FOR STATE OF FLORIDA

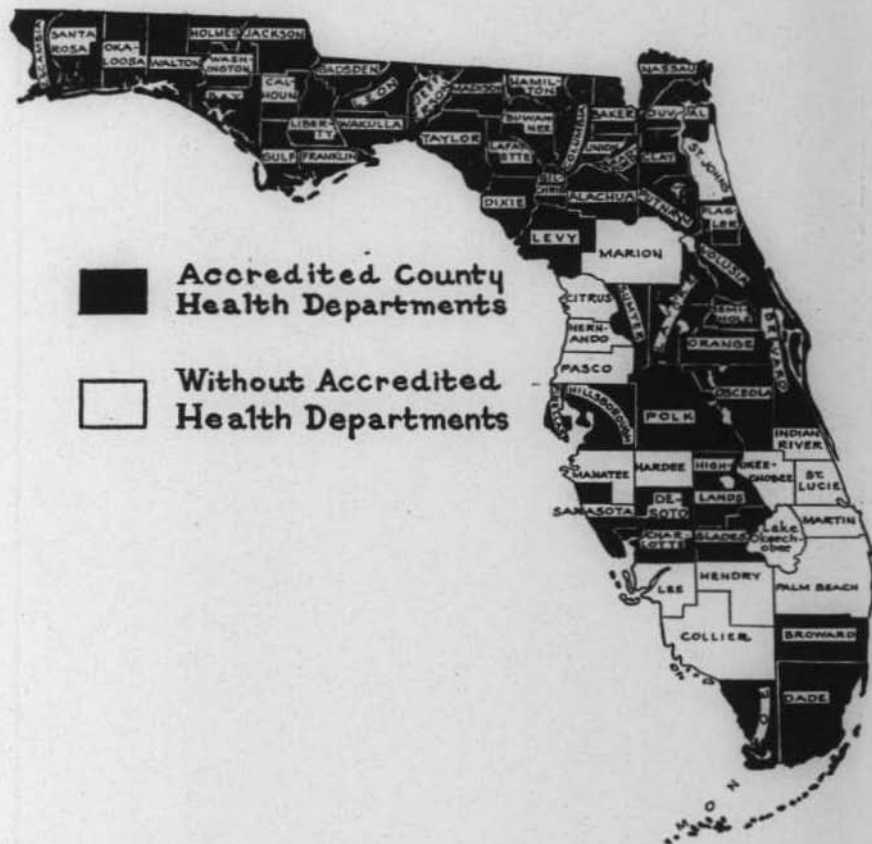
COUNTY	BY STAGE OF INFECTION								Pregnancy	BY RACE AND SEX						Source of Ref.			BY AGE GROUP							
	Primary	Secondary	Early Latent	Late Latent	Late		Cong.	Not Stated		Total	White		Colored		Not Stated	Total	Clinic or Inst.	Priv. M. D.	Not Stated	0-9	10-19	20-29	30-39	40-49	50--Over	Total
					Other	C.N.S.					M.	F.	M.	F.												
Alachua	49	39	182	102	0	10	22	35	439	7	21	28	155	209	26	439	351	88	27	14	100	160	83	36	19	439
Baker	3	5	7	4	1	4	1	5	30	4	3	2	11	14	0	30	22	8	0	1	3	11	7	6	2	30
Bay	16	52	70	21	0	6	2	20	187	10	18	28	57	77	7	187	130	57	7	2	50	77	28	15	8	187
Bradford	10	23	26	7	0	5	0	7	78	0	6	15	29	26	2	78	53	25	3	0	18	38	12	4	3	78
Brevard	7	22	59	29	1	10	5	35	168	4	8	18	53	83	6	168	57	111	6	4	16	58	50	18	16	168
Broward	28	32	208	72	1	12	10	20	383	23	27	24	144	169	19	383	262	121	27	3	68	157	74	36	18	383
Calhoun	1	1	4	0	0	0	1	0	7	0	4	3	0	0	0	7	5	2	1	1	2	3	0	0	0	7
Charlotte	2	6	4	1	0	0	0	2	15	0	2	4	3	6	0	15	11	4	1	0	3	7	0	3	1	15
Citrus	5	0	10	7	0	0	0	2	24	2	3	3	5	12	1	24	5	19	0	0	9	7	3	4	1	24
Clay	8	19	22	11	0	0	3	2	65	1	7	16	11	31	0	65	44	21	0	1	16	28	9	8	3	65
Collier	1	5	12	7	0	2	2	1	30	0	0	2	9	19	0	30	21	9	1	0	4	11	5	7	2	30
Columbia	13	11	51	39	0	7	6	10	137	3	14	14	41	67	1	137	61	76	7	5	22	53	22	21	7	137
Dade	151	211	645	352	12	60	34	162	1627	49	213	203	554	622	35	1627	1198	429	43	15	194	718	381	170	106	1627
DeSoto	4	8	10	13	0	0	2	7	44	2	4	11	10	15	4	44	18	26	3	2	4	15	9	8	3	44
Dixie	1	3	9	4	2	2	1	1	23	1	3	4	4	12	0	23	16	7	0	0	4	5	8	4	2	23
Duval	216	378	863	505	8	89	49	580	2688	68	300	335	812	1068	173	2688	1540	1148	282	30	338	974	562	298	204	2688
Escambia	104	110	310	123	6	16	13	2	684	10	69	76	239	295	5	684	563	121	6	7	145	320	132	47	27	684
Flagler	12	3	45	12	1	3	22	0	98	1	9	3	49	37	0	98	97	1	0	12	21	21	16	19	9	98
Franklin	5	3	11	13	0	1	0	4	37	2	5	2	11	10	9	37	18	19	1	0	6	17	4	4	5	37
Gadsden	73	44	219	39	1	5	13	15	409	9	12	14	136	241	6	409	293	116	20	6	101	137	81	42	22	409
Gilchrist	1	6	7	2	0	1	0	4	21	0	2	3	8	8	0	21	4	17	2	0	4	4	5	4	2	21
Glades	2	2	10	8	0	0	0	4	26	0	1	1	17	6	1	26	19	7	0	0	3	10	9	1	3	26
Gulf	3	9	33	24	2	2	3	2	78	0	7	8	28	33	2	78	55	23	7	2	16	30	10	9	4	78
Hamilton	4	5	8	5	0	1	1	1	25	1	3	2	7	10	3	25	20	5	0	0	7	9	6	2	1	25
Hardee	0	0	6	4	0	1	1	8	20	0	3	6	5	5	1	20	4	16	0	0	5	7	4	1	3	20
Hendry	8	23	131	6	0	9	1	5	183	0	2	3	153	21	4	183	167	16	3	0	5	113	41	18	3	183
Hernando	2	13	9	6	0	1	1	2	34	0	3	1	11	19	0	34	19	15	1	1	10	13	5	2	2	34
Highlands	32	22	70	27	0	7	2	18	178	3	7	14	67	82	8	178	107	71	7	1	28	67	44	22	9	178
Hillsborough	137	143	224	209	8	56	29	141	947	31	175	151	266	341	14	947	632	315	29	11	155	388	189	119	56	947
Holmes	4	3	13	9	0	2	6	1	38	2	11	16	6	4	1	38	33	5	3	3	7	9	8	3	5	38
Indian River	11	14	50	20	0	8	1	10	114	0	11	10	32	60	1	114	82	32	6	1	20	36	27	15	9	114
Jackson	15	12	53	12	0	2	4	1	99	2	10	18	27	38	6	99	89	10	12	2	21	44	9	8	3	99
Jefferson	6	15	48	7	0	3	3	5	87	1	3	8	30	45	1	87	68	19	4	1	36	29	7	5	5	87
Lafayette	0	2	0	1	0	0	1	0	4	0	0	2	2	0	0	4	3	1	0	1	1	1	0	1	0	4
Lake	48	47	124	72	6	21	5	32	355	6	34	34	152	119	16	355	221	134	18	3	43	148	94	27	22	355
Lee	28	16	55	14	0	2	1	10	126	0	10	7	52	40	17	126	93	33	39	1	11	45	15	10	5	126

(Continued on next page)

TABLE 9 (Continued)—REPORT OF SYPHILIS ACCORDING TO STAGE OF INFECTION, PREGNANCY STATUS, RACE AND SEX. SOURCE OF INFECTION AND AGE GROUPS, BY COUNTIES AND FOR STATE OF FLORIDA

COUNTY	BY STAGE OF INFECTION								Pregnancy	BY RACE AND SEX						Source of Ref.			BY AGE GROUP								
	Primary	Secondary	Early Latent	Late Latent	Late		Cong.	Not Stated		Total	White		Colored		Not Stated	Total	Clinic or Inst.	Priv. M. D.	Not Stated	0-9	10-19	20-29	30-39	40-49	50--Over	Total	
					Other	C.N.S.					M.	F.	M.	F.													
Leon	34	42	132	76	0	5	5	70	368	4	34	15	127	115	77	368	228	140		63	2	63	126	71	26	17	368
Levy	9	8	42	17	1	6	3	7	93	0	4	4	35	48	2	93	78	15		4	0	21	24	23	16	5	93
Liberty	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
Madison	14	8	41	18	0	2	13	9	105	5	2	6	38	58	1	105	96	9		1	4	32	32	22	9	5	105
Manatee	18	20	65	26	0	11	11	6	157	4	17	20	47	72	1	157	127	30		6	4	36	55	27	23	6	157
Marion	27	42	121	71	0	3	12	17	293	2	17	16	102	142	16	293	215	78		27	3	43	120	50	28	22	293
Martin	2	11	10	9	0	1	1	6	40	1	5	3	14	15	3	40	20	20		8	0	3	10	6	7	6	40
Monroe	3	6	33	22	1	1	0	12	78	2	11	12	22	28	5	78	66	12		3	0	4	35	22	3	11	78
Nassau	2	11	19	28	0	1	1	10	72	9	4	2	26	37	3	72	29	43		3	1	14	25	15	7	7	72
Okaloosa	3	6	9	4	1	3	1	1	28	0	5	8	6	9	0	28	21	7		0	1	7	9	5	5	1	28
Okeechobee	2	1	6	1	0	3	0	1	14	0	0	0	9	5	0	14	10	4		0	0	1	6	4	1	2	14
Orange	104	115	253	91	1	28	22	107	721	12	77	104	198	259	83	721	423	298		54	14	104	293	149	72	35	721
Osceola	5	6	10	6	0	1	0	8	36	0	6	7	9	8	6	36	15	21		4	0	6	9	9	3	5	36
Palm Beach	87	138	663	295	10	83	41	81	1398	14	103	72	635	543	45	1398	995	403		30	11	189	627	350	126	65	1398
Pasco	4	14	24	28	0	1	0	12	83	2	9	14	11	46	3	83	14	69		3	0	12	27	20	14	7	83
Pinellas	61	88	131	57	2	7	14	26	386	12	65	69	109	132	11	386	273	113		16	7	78	158	59	43	25	386
Polk	58	53	160	123	3	15	19	122	553	6	52	59	160	244	38	553	255	298		49	11	82	210	109	63	29	553
Putnam	6	15	62	102	2	4	3	38	232	8	67	36	53	65	11	232	28	204		11	1	41	76	45	30	28	232
St. Johns	7	11	45	36	0	5	1	27	132	2	18	11	29	53	21	132	48	84		27	1	17	51	15	11	10	132
St. Lucie	19	17	96	30	0	9	7	35	213	3	10	12	94	86	11	213	166	47		12	6	30	87	45	26	7	213
Santa Rosa	4	0	10	3	0	1	0	2	20	0	3	4	6	7	0	20	17	3		0	0	6	7	3	2	2	20
Sarasota	1	7	29	12	0	3	2	6	60	1	7	7	20	24	2	60	36	24		3	1	8	23	15	9	1	60
Seminole	9	29	98	114	0	11	3	37	301	3	10	12	111	149	19	301	157	144		35	0	35	99	59	49	24	301
Sumter	7	5	41	28	5	12	6	1	105	3	20	6	41	34	4	105	55	50		3	3	12	35	31	8	13	105
Suwannee	7	10	64	16	0	9	4	3	113	4	8	12	44	46	3	113	91	22		19	3	16	29	21	14	11	113
Taylor	10	7	9	7	0	0	2	13	48	2	7	5	14	18	4	48	28	20		5	0	12	20	6	3	2	48
Union	5	8	11	5	0	0	1	1	31	1	3	4	10	14	0	31	24	7		1	1	4	16	3	5	1	31
Volusia	41	43	142	164	2	11	27	29	459	3	40	42	169	182	26	459	299	160		26	9	72	175	95	50	32	459
Wakulla	1	0	10	2	0	0	0	1	14	2	1	3	6	4	0	14	12	2		0	0	2	9	3	0	0	14
Walton	2	4	11	5	0	0	1	9	32	0	11	9	7	5	0	32	24	8		4	1	2	11	11	0	3	32
Washington	0	4	10	7	0	2	2	0	25	0	0	3	6	13	3	25	20	5		2	2	7	6	4	2	2	25
State Hospital	0	1	14	48	0	115	0	1	179	0	32	17	63	53	14	179	179	0		3	0	3	16	55	58	44	179
State Prison	3	0	0	140	0	0	0	0	143	0	33	4	91	13	2	143	143	0		63	0	8	25	26	13	8	143
Camp Blanding	19	2	4	0	0	1	0	0	26	0	7	0	19	0	0	26	26	0		0	0	0	23	3	0	0	26
Naval Air Station	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	1	0		0	0	0	1	0	0	0	1
Out of State	11	12	20	8	0	2	0	15	68	0	21	6	30	9	2	68	58	13		10	0	8	29	11	4	6	68
Florida--TOTAL	1600	2051	6003	3386	77	704	447	1867	16135	347	1720	1693	5557	6380	785	16135	10655	5480		1061	216	2474	6274	3351	1727	1032	16135

STATE OF FLORIDA





Because of current laws requiring premarital and prenatal blood tests, mother above at right, bore a husky, healthy baby. Prior to enactment of these laws Florida mothers and children were unprotected and often faced blindness, paralysis, insanity and otherwise helpless lives such as the maimed syphilitic child at left. Thanks to the two laws which have functioned during past 15 months, 2,825 unsuspecting marriage applicants and 1,900 expectant mothers found infected with syphilis were able to receive proper treatment and most of them are now living normal, healthy lives.



Florida **HEALTH NOTES**

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SCHOOL HEALTH ISSUE

The State Board of Health

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Governor of Florida

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<i>Services</i>	Pinellas	Clearwater	<i>Health</i>
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Please address all Health Notes correspondence to Ruth Stuart Allen, Editor.

Florida **HEALTH NOTES**

ESTABLISHED 1890

FLORIDA SCHOOL HEALTH PROGRAM

The young lady who peers smilingly through the beautiful Grecian columns of the Florida State Board of Health building in Jacksonville is a student at Caroline Brevard grammar school, Tallahassee. (Photo by RSA).

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OUR JOINT RESPONSIBILITY

**DR. WILSON T. SOWDER, State Health Officer, and
MR. COLIN ENGLISH, Superintendent, State
Department of Education**

Good health is essential for happy, successful living. Educators with this in mind, emphasize that the protection and promotion of health must be a major objective of education. Public Health workers, always aware of the importance of child health, are giving an ever increasing amount of attention to the protection of the health of the growing child. In these matters the objectives and hopes of the State Board of Health and the State Department of Education coincide. Our agencies recognize and emphasize the need of joint planning and coordinated effort for the attainment of our health objectives.

There are three approaches to the school health program. First we must provide for "Healthful School Living." Our children must attend school. We can not permit them to gather where the physical environment may be hazardous to their health. Adequate space, proper lighting, appropriate and clean toilet facilities, a safe water supply, and a good school lunch are obvious needs. The sanitary engineers and the sanitarians in our Health Departments, the supervisor of school plants of the Department of Education, the county superintendents, principals, teachers and school custodians share responsibilities in this field. Likewise it is essential that the organization of the school day and the relationships between teachers and pupils and among the pupils themselves be of such a nature that will promote the health of the children.

The provision of "School Health Service" is a second approach. Health examinations of school children are urgently needed. There are over 400,000 pupils in our public schools; several thousand have important health problems. The future welfare of such children is at stake. Certainly every child who appears to be in sub-normal health must be carefully examined either in the school or by a private physician. This is also true of all children entering school. All significant correctible abnormalities must be found and corrected. The latter can be obtained only with the cooperation of practicing physicians and dentists.

Every possible precaution must be taken to prevent the spread of infections in school. The parents must be urged to keep ailing children at home. The teachers must be alert in their observations of pupils. The Health Department has broad responsibilities as in the handling of outbreaks, immunizations, aiding in the early detection of tuberculosis, etc.



Youngsters stood in line daily for their "Pot Likker" at the Polk City school near Lakeland. Occasion was the study conducted by Dr. Walter Wilkins, director, Nutrition Investigations Service and his staff as a part of an investigation in six Polk County summer schools of the health of the children and the effects on them of certain foods. Every child in the school received from one to two glasses of the liquor a day, squeezed from canned spinach and turnip greens during the experiment. Dr. Wilkins says he isn't yet in position to say how much the youngsters benefited from the juice, but: "There is no doubt but that the children are brighter. Instead of being draggy, as we found them, they are on their toes. They have been eating more and gaining weight." Dispenser of the "likker" to her second grade children is Mrs. Blanche Ward, teacher. (Photo by Tampa Tribune).

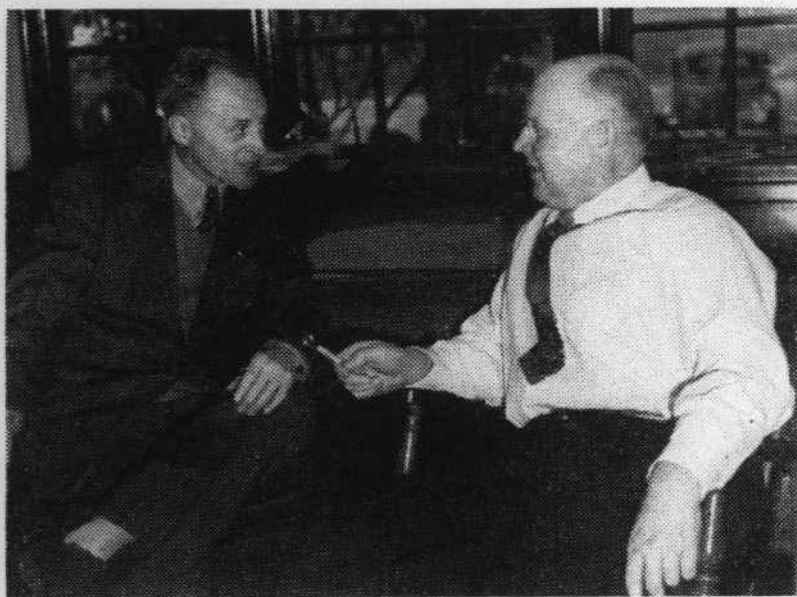
For the administration of first aid there must be at hand an adequate kit and an individual instructed in its use. This responsibility may be left chiefly to principals or designated teachers.

Children found sick in school must be properly cared for. The principal who plans for the transportation of these from school to home is contributing to the school's health service program.

Thus these broad activities require the participation of health officers, public health nurses, practicing physicians and dentists, county superintendents, supervisors, principals, teachers and parents.

Education in health is the third approach to the School Health Program. The objective here is to translate knowledge into attitudes and habits of living. Teaching both in and out of schools is needed. The child, the parents and the community must be considered for effective health education. To attain this we believe there is a place for trained health educators who would work in schools and communities and coordinate the activities of our Departments of Health and the Schools.

The situation is clear: we in the Board of Health and the Department of Education both have responsibilities for the health of Florida's school children. We must have joint planning and coordinated action. The superior administrative arrangement seems apparent: all professional health workers (physicians, nurses and others) should be a part of an organized public health



We don't find any rollicking children in the above picture, but what we do see represents one of the most important steps in a good school health program; a friendly attitude between local health officer and school personnel. At left is Dr. R. N. Nelson, director Sumter County Health Department, talking over the school health program with County Superintendent of Public Instruction G. B. Tompkins of Bushnell. Dr. Nelson's program in school examinations is so far advanced that the Bureau of Local Health Service has advised that it is not necessary to give him supplementary help in the form of one of the many new physicians who were added to the State staff to expedite the current year's school health work. (Photo by RSA).

unit, just as all educators should be a part of the school system. The needs are obvious: there must be an awakening of concern and a public demand that health service so essential to the welfare of our children be made generally available.

It is our combined task to protect and improve the human resources of our State. There are rich opportunities. With adequate support we shall go forward.

FROM THE DOCTOR'S NOTES

DR. GRACE C. HARDY, Pediatrician
Bureau of Maternal and Child Health, State Board of Health

Little Miss Florida looked up at me from the examining-table. She was confused and shrinking and I hoped my face registered nothing but an indifferent friendliness though at that moment tears might have been forgiven. Her hair was dry and brittle;



Dr. Grace Hardy of the Maternal and Child Health Bureau is shown giving careful consideration to the pitter patter of the little boy's heart, a procedure which is involving closer thought and study over the State than ever before. Because, it has been found that there are more crippled hearts among children than had formerly been suspected; an outcome perhaps of light attacks of rheumatic fever. Hence, more time and care to the routine school examinations. Looking on is one of the 25 young physicians who are doing temporary service with the State Board of Health in its efforts to speed up school examinations. Picture was made in Duval County by Deane of Jacksonville Beach.

her skin coarse and rough and thick and wrinkled; most of her teeth were severely decayed; her blood contained just half as much oxygen-carrying substance as is normal. In a low voice I could scarcely hear, she said: "I didn't wash my feet 'cause my Mother didn't have any water. She has to carry it a whole block and there are five of us." I wondered where the eight year old child found the courage to struggle to school and find a place among her classmates with so many strikes against her—anemia, severe vitamin deficiency and dirt.

Little Miss Florida looked up at me. She was clean and her shining hair was tied up pertly with red bows. Her teeth were brushed and she was sweet-smelling and happy. But what is this? Her weight is much below average for her age and height and her flesh is flabby. I asked, "Do you drink milk?" "Yes," she replied, "I have a glass every morning for breakfast. There are four children in our house and Mother divides the bottle up."

Little Miss Florida looked up. She was comparatively well nourished and happy, yet even she had marked dental decay. At her dismissal she flashed a beaming smile and said, "I had a nice time."

The morning slipped away. One after another the little ones filed through. The story grew monotonous—decayed teeth, anemia, severe vitamin deficiency, dull hearing, sores on the skin



Here is a picture which does any old heart good! It shows a thriving group of high school boys and girls at the little town of Alachua in Alachua County registering prior to receiving chest x-rays. One couldn't hope for a healthier, happier group of youngsters, yet the insidious disease of tuberculosis might be lurking in one, maybe two, ready to take advantage of the proper moment to "take over." But these boys and girls know x-rays today may save their lives tomorrow. They are going to be sure their lungs are in good condition by taking advantage of the State Board of Health's program to x-ray every man, woman and child over 15 in Florida. Program in Alachua County, as in most, received the cooperation of the local Tuberculosis and Health Association. Two local members are volunteering their help by checking in the youngsters. (Photo by RSA).

and numerous ills related to infection. I picked up a book from a pile on a table at the door of the poor cafeteria. Its title was "Building for Health" and chapter 3—"Foods that make us GROW and GO." The picture of the two boys—brothers they were—flashed into my mind. They were really candidates for hospital beds. Their hemoglobins registered 5 and 6 gms. respectively; again that paralyzing lack of oxygen-carrying substance without which weakness and poor resistance to disease is inevitable. But these boys were in seats in a school-room in our State.

SIX YEARS OLD came in. His grandmother came with him because she wished to find out why the child seemed breathless after even a little exertion. We found many of the signs of rheumatic heart disease which explained his trouble. The grandmother listened appreciatively and took him to a pediatrician for further study and instruction regarding his care.

TWELVE YEARS OLD came in. He had been playing ball that morning. He was strangely pale and the rapid heart rate did not subside as it should. Yes, the heart was dilated and he had some fever. We sent him home to bed. The family's physician came and after study found he had rheumatic heart disease and an early tubercular infection.

That night I dreamed a special dream. It was not remote and intangible but it sprang, no doubt, from much wishful thinking. It had to do with warm shower baths for children from homes where water was scarce; with low-cost cafeterias where milk and vegetables were plentiful; with a convalescent home where children with crippled hearts could recover and add many useful years to an otherwise shortened life: with more readily available medical and dental care for the many needing it: and — have you guessed? — with a continuing school health program at the heart of it all.

THE HEALTH DEPARTMENT AND THE SCHOOL HEALTH SERVICE PROGRAM

DR. GEORGE DAME, Director
Bureau of Local Health Services, State Board of Health

General Plans

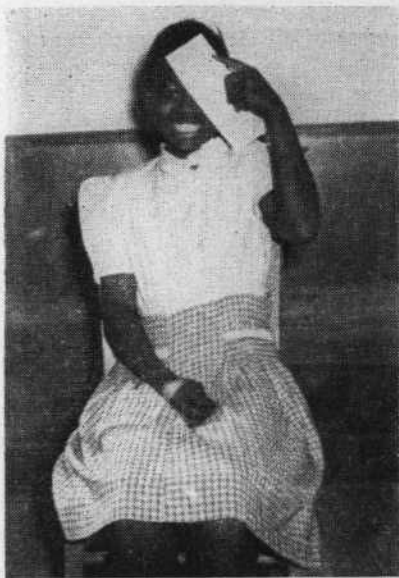
The first essential for health services in the schools is full time adequate health departments in all counties. At present 52 of Florida's 67 counties have this organization. Such service, we hope, will soon be available to all parts of Florida.

The staff of each health unit includes as a minimum a physician, (the health officer), one or more public health nurses and one or more sanitarians. Each of these professional health workers has a part in providing a balanced health program for schools.

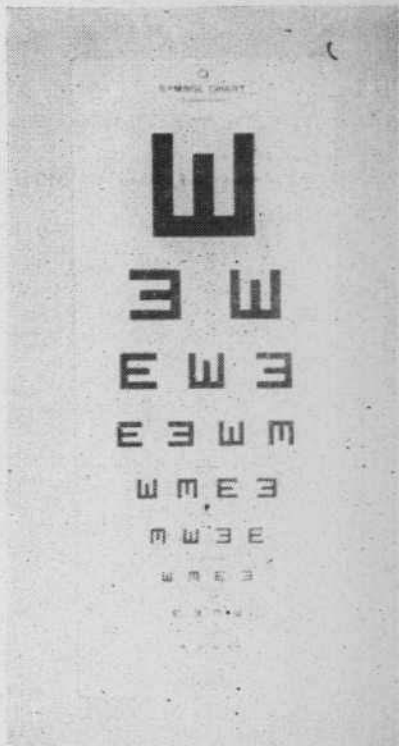
The Health Officers, in association with the County Superintendents of Public Instruction, have the responsibility of



This is another picture of Dr. Walter Wilkins and a member of his staff looking over "Johnnie" for signs of nutritional deficiencies. Picture was made in Polk County during Dr. Wilkins' survey looking for reasons for the high rate of anemia in the six summer schools. Johnnie's mother (right) may be interested in the procedure but he apparently thinks the examination is so much nuisance.



An important phase of the school health examinations is the Snellon test for eyes. Here, we give the exact procedure of the test, with one exception, which was made necessary because of limited space for the photographer—distance. The child when taking the actual test must be 20 feet from the chart. (Photos by RSA).



Picture shows the entire chart.



These pictures were made in Leon County where one of the most ambitious Negro school health programs in the State is in motion. In this case the public health nurse is giving the test. Actually however, this is the teachers' responsibility. A rear view, showing the nurse adjusting the shield over the chart.

organizing the health service program for schools in their respective areas. The proposed activities will be brought to the attention of the County Medical and Dental Societies and can go forward effectively only with the support of the practicing physicians and dentists. Volunteer health organizations frequently will aid materially. In some areas, community health councils have been established and provide excellent support for the health work in the schools and in the community.

The plan recommended provides that the health status of each child shall be considered

first by the teacher and public health nurse. Children thought to have health problems or physical defects will be referred to the physician for examination. All entering school, and when practicable, all children in other selected grades will be examined. Follow through activities will be designed to secure the correction of health defects. Immunizations will be made available and recommended for those not previously inoculated.

As an outgrowth of school health programs, desirable opportunities for general community education in matters of child health are frequently available. Discussions in the PTA or similar organizations are desirable and effective.

The Public Health Nurse in the Schools

The public health nurse can devote only a part of her time to school work. She must be there to assist during the health examinations; she will visit schools periodically to help with the solutions of various health problems as they arise.

As already stated, it is recommended that in preparation for the health examinations, the health status of each child should be reviewed first by the classroom teacher. In order that this may be done effectively, the nurse will discuss procedures with the teachers, and demonstrate such technics as vision testing, hearing testing, weighing, measuring, observation of skin conditions, etc. The teacher with the knowledge obtained through day to day observation and the above type of inspection will divide the pupils into two groups. Those who are evidently in good health and with no significant defects are not referred to the nurse; the others who may have some health or physical defects are referred. The nurse inspects each of the latter. She decides whether the child for any reason needs to be seen by the physician on his visit to the school.

The general arrangements for the health examinations by the physician will be worked out by the nurse and teachers. Parents will be invited and urged to be present. A suitable room for this work will be selected. Volunteers to record the doctor's findings will be secured and instructed. The teacher or a volunteer assistant will be told how to prepare a child for examination. General arrangements must be such that the time of the physician, nurse and other assistants will be used with maximum effect.

The follow through activities are of high importance. These are largely the responsibility of the nurse but the assistance of the teacher is essential. The nature of the conditions requiring atten-

tion must be understood by both teachers and parents. A visit to the home may be required if the parent was not present at the examination. The teacher may readily determine whether recommendations are being followed. Obstacles to desired action often require attention. It is of little value to tell parents that the child probably needs glasses, if the family cannot pay the usual cost. Voluntary agencies often aid in this situation. Much of the value of the health examinations is lost if there is failure, for any cause, to obtain a correction of remediable defects.

The responsibility of the nurse in the prevention of communicable diseases includes assisting with the immunization program. In the presence of any outbreak, or of scattered cases of infectious diseases, the nurse, under the Health Officer's direction, will give needed attention to the school and homes involved.

Incidental to her other activities the nurse aids in health education. Parents and older pupils faced with specific problems need and want instruction. Under these circumstances recommendations can readily be translated into good health practices.



Dr. Carrol T. Bowen, director, Levy County Health Department, is the only other local health officer who has so nearly completed his current school health examination program that he does not need extra help from the State Board of Health. It is interesting to note too, as in the case of Dr. Nelson of Sumter County, his close contact with local school officials. In the upper left hand corner we find him (right) explaining a film on tuberculosis to Glenna Wilson, principal of the Chiefland school. So far as we know Levy County is the only one where VD films are shown to mixed high school audiences. In the main picture we find all ages, enrapt in the TB movie whose heroine is a beautiful Spanish senorita. Dr. Bowen declares that "cooperation in the Levy County schools is the best." (Photo by PSA).

The Physician in the Schools

In most instances the health officer, himself, will visit the schools. In larger counties a medical assistant may be obtained for this work.

The major responsibility of the physician in the school is to examine all children referred to him. These children already have been "inspected" by the nurses; the physician will give a careful medical examination. Findings will be reported in non-technical language on a record form which will remain in the school. Thus physician, nurse, teacher and principal will have common knowledge and will share the responsibility for the follow through effort to obtain the correction of detected abnormalities.

In addition to the above, the physician will examine all children who have entered the school during the current year. It is desirable, but not always practicable, to see all who will leave school at the termination of the year. When the staff is adequate, routine examinations of all in other selected grades may be carried out.

Any physician who examines school children becomes keenly aware of the health needs of his community. The nature of the problems should be more generally known. As opportunities arise, the health officer will keep the public informed.

The Dentist in the School

It has been found that 80 percent or more of our elementary school children have dental defects requiring attention. It was found that only 20 percent of those needing care were from homes definitely able to pay for private dental service. The remainder either definitely could not pay (35 percent) or were classed as doubtful as to their ability to pay. The need for dentists in county health departments is obvious. The plan is to meet the problem in part by mobile dental units to serve smaller counties and to employ dentists on a full or part-time basis for the larger counties.

The Sanitarian in the School

The major concern of the sanitarian is to aid in obtaining a healthful school environment. From time to time he will visit the schools for a careful inspection of toilet facilities, water supplies, the cafeteria, etc. He will aid in every practicable manner in improving the school plants.

The State Board of Health and the Schools

Local public health workers may look to the Bureaus of the State Board of Health for certain types of assistance. As in other activities, consultant services are available. The sanitary engineer will give attention to environmental problems. All laboratory tests such as examinations for hookworm are done in the State Laboratory at Jacksonville or one of its branches. Mobile X-ray units from the Bureau of Tuberculosis will be made available in accordance with a planned program. The Bureau of Maternal and Child Health has particular interest and concern in the furtherance of school health work. The Division of Health Information has available an increasing supply of educational aids. Assistance in the study and handling of problems in nutrition is provided by the Division of Nutritional Investigation. Indeed all staff members of the various bureaus stand ready to aid in any practicable manner.

Governor Caldwell, referring to the importance of the hookworm problem, has called attention to the loss involved through the lowering of the capacity of school children by sub-normal health. A child with early unrecognized or neglected heart disease may be a cripple throughout a shortened life; by early treatment the same child might be brought back to normal health. Progressive eye abnormalities which would lead to permanent visual impairments have been found in school children; vision can be preserved by detection and proper treatment. It is worth much in human and economic values to prevent one case of blindness or near blindness. Less impressive but equally important are the permanent effects of long continued malnutrition. A school health program costs, but the lack of it costs even more. We cannot afford to have less than a school health program adequate to insure the prevention or correction of preventable and correctible defects. Moreover, we must go beyond this and strive progressively to improve the health status of children so they will be as healthy and strong as their heredity will permit. True, more public health workers are needed, and we as a State cannot afford to be without them.

THE EDUCATOR AND THE SCHOOL HEALTH PROGRAM

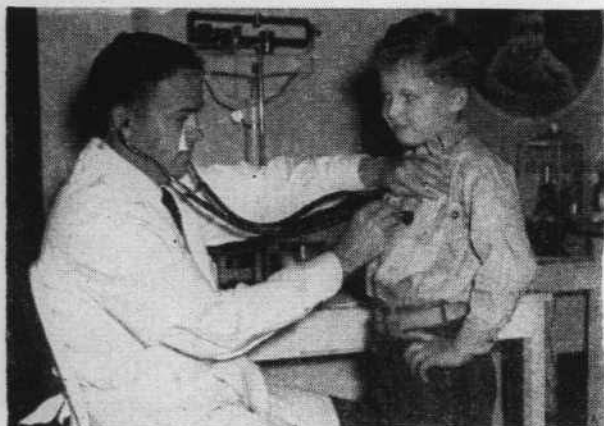
**JOE HALL, Director of Instruction,
State Department of Education,
and MISS LOUISE SMITH, Health Consultant**

An important part of our positions is meeting superintendents, principals and teachers and discussing problems with them. There are many spontaneous references to the health program. Obviously educators are interested. They desire to aid in the protection and enrichment of physical and mental health. They want the future citizens to have good health habits, to think of health in terms of scientific knowledge and to be aware of the need and importance of organized public health activities. May I share experiences by summarizing recent actual conversations with educators?

Elementary School Teacher: "I am certainly thankful for the training I have had in health. This morning on inspecting my children, I noticed that little Mary's face was flushed; on more careful examination, it was evident she had a rash. Immediately she was sent to the health rooms to wait until her mother could come for her. We certainly appreciate having a cot in a separate

room. It was planned to meet situations of this type.

"My training in First-Aid is of very practical importance also. Almost every day someone is injured. Today one of the children fell on the cement and came in with a bleeding knee. We have a good first-aid kit, so these problems are handled readily. Occasionally we have

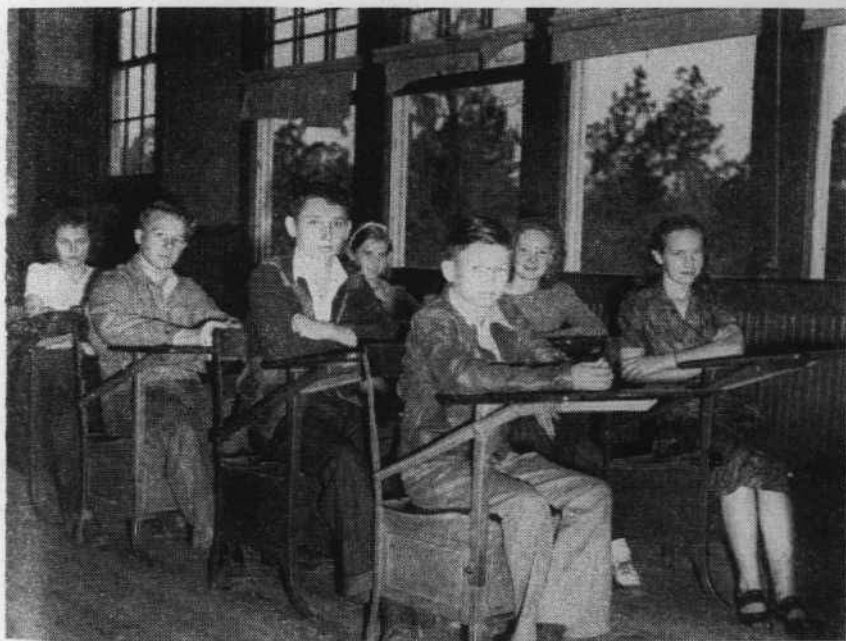


Dr. Bruce Underwood, director, Leon County Health Department, gives this young husky's heart a thorough study, because outward appearances are sometimes deceiving. However, had Dr. Underwood heard the tinnest protest of the youngster's heart, he'd have put him on an examination table for more careful study; directed him to the family physician without delay. Usually the above type heart examination is routine but health officers are taking more and more time with their small patients in order that not one symptom may escape. (Photo by RSA).

serious injuries. Earlier in the year one of the children fell and broke an arm. Naturally, the principal and I had to take responsibility until other assistance could be obtained.

"We feel that day to day supervision of the child is very important but the children themselves are particularly impressed by the health examinations. As you know, our program has been to have the doctor examine every child who enters school. Thereafter, the physician gives attention to those children referred to him through the public health nurse. It is my responsibility to select and direct to the nurse the children whom I believe to have health problems. Naturally, my opinion is based on day to day observation.

"Before the doctor comes we give careful thought to preparing the children for the examination. One must overcome uneasiness since children tend to think of doctors and nurses as those who give them 'shots'—which hurt. We have been able to develop the attitude that the health workers are the childrens'



These very grown-up boys and girls in the Clay Hill school, Bradford County, are a part of a special group study being made by Vera Walker, nutritionist, Bureau of Maternal and Child Health, to ascertain the beneficial scope of non-fat dry milk solids in the school lunch program. Careful daily records are being kept of the youngsters to find out if they gain, lose or retain the same weight during this period. The project is a part of a larger cooperative program of the U. S. Department of Agriculture and the State Department of Education. (Photo by RSA).

best friend and that a little hurt is nothing as compared to the benefit which is received from preventive treatments."

High School Principal: "I believe that what is educationally sound should be made administratively possible. We believe in health education and we are providing it in our curriculum. Every teacher should be a health teacher; but we also believe that special instruction in health is needed.

"As you know, we are one of the schools which has established on an experimental basis the new course in health and safety for 11th grade pupils. The class meets five times per week throughout the whole year and a full unit's credit is allowed. In accordance with recommendations, it deals with personal, family and community health problems, with first-aid and accident prevention including driver education and training.

"Let me tell you some of the things which have happened. We secured a teacher with a major in health education. She is also teaching biology. This combination is working very successfully. A faculty committee on health was appointed with the health education teacher as chairman. All matters pertaining to health are referred to the committee. This has given a coordinated well-balanced program. At present they are surveying the whole health problem in our school. This will serve as a basis for re-planning our program for next year. Certainly we have succeeded in securing the interest of all faculty members.

"The students are carrying responsibility also. The student council appointed a health and safety committee. The sponsor is the health education teacher. The members are from the 11th grade. Representatives from this committee meet with the faculty committee.

"In addition to this, with the association of our local health officer, a community health committee was formed. Thus, the interest of the students, faculty and community are brought together.

"I should like you to hear the impressions of our health education teacher concerning some of the recent activities of her class."

Health Education Teacher: "Our class had a most interesting experience today. We have just returned from a visit to the county health department. The students were delighted. The health officer, the nurse and the sanitarian each explained his work, with many interesting illustrations. The students gained a real understanding of the public health problems and activities in our county.

"We have worked throughout the year closely with members of the health department. During or following the school examinations, the physician or nurse explained the significance of findings. Under the guidance of the nurse, I have sought to help the individual student to solve his or her problem. The principal has arranged for me to have one hour a day for the sole purpose of counseling pupils on their personal health problems. Through this cooperation we believe we are being highly successful in giving health examinations their maximum value."

County Superintendent: "We are very pleased with the progress of our school health program but one need is becoming more and more apparent. It is obvious that there must be coordination of our health activities with those of the local health department. In this county there is a very congenial, though informal relationship between our organizations. Still, we feel that the time may come when an official relationship could be established. An individual trained in health education could be placed in a coordinating position. He or she would serve both the schools and the health department. This person would be both a public health educator and a school health educator and mutually valuable to each group. We have not considered the administrative problems involved but we feel, also, that what is educationally sound should be administratively possible."

We in the department of Education, the superintendents in the counties, and the educators in the schools all want Florida to have the finest school health program in the Nation. We have said for years that the protection and improvement of the health of the child was a major objective of education; now we are seriously concerned with the development of a health program which will attain this objective. As educators we need and must have the cooperation of strong local health departments. Recent progress encourages us to believe this will soon be available in all parts of Florida. The schools own health program is also "on the march." We need teachers better trained in health; our colleges are improving the quality and extent of this training. We need competent special health educators; arrangements have been completed for training these in Florida. We need public understanding, community cooperation, adequate financial support; there is increasing evidence that these needs also will be met!

CURRENT SPECIAL SCHOOL HEALTH PROGRAM

DR. ALBERT V. HARDY,* Director
Bureau of Laboratories, State Board of Health

Much would be accomplished if all Health Officers devoted exclusive attention to school work for the remainder of the school year. Actually an equivalent of this has been arranged. Thirty-five physicians, a pediatrician and nurse consultant have been added to the State Board of Health's staff. These will be assigned to 38 of the counties with organized health units. An unusual situation made the services of these physicians available. Teach-



Dr. W. G. C. Hill, director Suwannee County Health Department, and Mrs. Gladys Caldwell, public health nurse, are applying a tuberculosis patch test to this little fellow as a final round-up of the school health examination. Some health officers use the patch test extensively and others prefer to wait and have the possible suspects x-rayed when the Bureau of Tuberculosis Control mobile x-ray unit visits the county—or, in extreme cases, x-rayed by a local technician. Dr. Hill, because of extreme tardiness of remodeling the county unit headquarters has been pursuing his school work almost to the exclusion of other programs—particularly those where examining rooms and general space are imperative for the execution of proper procedure. (Photo by RSA).

ing in medical schools was placed on an accelerated schedule during the war. This year graduation in certain schools occurred earlier than the beginning of available internships. In the intervening period these recent graduates are giving a much needed service in our schools and at the same time acquiring some practical experience in the field of public health.

Heretofore, Florida has not had a school health service program adequate to meet its needs. Prior to

*Chairman, State Board of Health Committee on School Health Problems.

1940 there were few public health units or full time workers. During the war years, the pressure of emergency duties made it impossible to give adequate service to the schools. The major purpose of the special health service project was to do in a short time the school examinations and immunizations which ordinarily should have been done in preceding years. This will make it easier to attain an adequate coverage of schools during the ensuing year.

The second special project has been in operation for more than a year. Its major objective was to develop a program in Health Education to meet the needs of Florida. In this, attention is being limited to selected schools and communities in Lake, Leon and Gadsden counties. Programs which are warmly approved have been planned and initiated. This project is providing the chart for future years—and already there has been substantial progress.

The importance of teacher education was immediately obvious. During the past summer a workshop in Health Education was held at the Florida State College for Women to help meet this need. An undergraduate major in Health Education is now being established at this institution. A similar workshop for Negroes was held at the Florida A. & M. College. An additional instructor in this field will be added to this College next year. The State Department of Education, recognizing the importance of this work, has established the position of supervisor of Health and

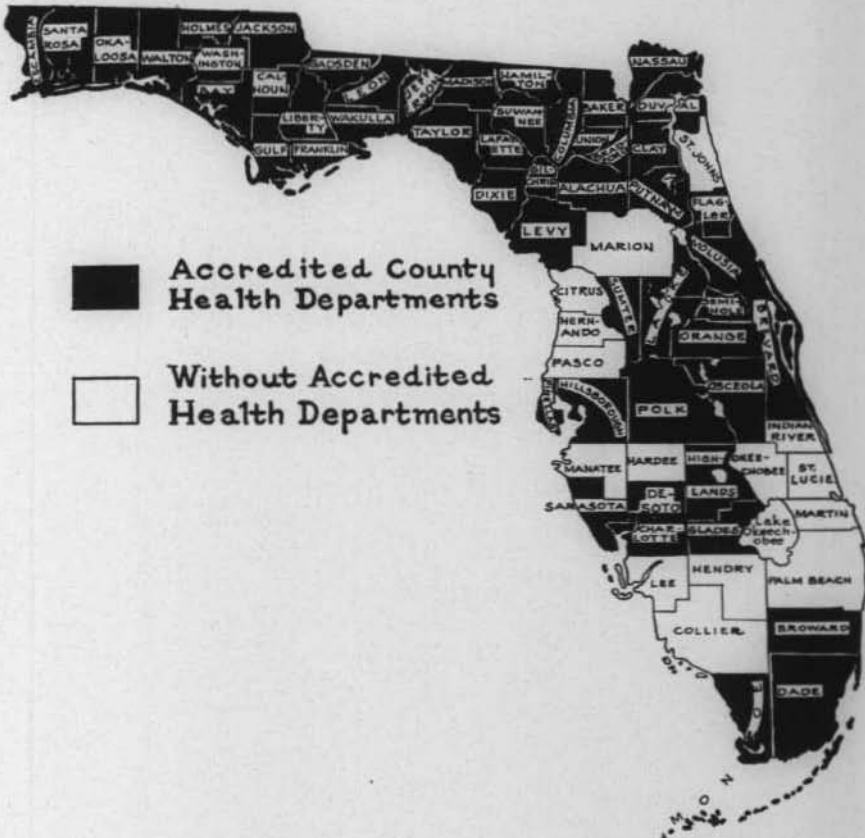


When youngsters are being immunized they usually line up in a hall and "see the doc" or nurse one at a time. However, when they've reached the point of "stick out your tongue and say ah" they laughingly line up in the school room office for their turn of throat and ear inspection. We see Dr. Underwood, director, Leon County Health Department (a popular new comer to the public health field in Florida), taking on a challenging bunch of Caroline Brevard school kiddies in the recent check of that school. (Photo by RSA).

Safety Education. Approval has been given also to the introduction of an elective course in the field of health for eleventh grade pupils. These steps represent substantial advances and give promise of future progress.

These special projects were made possible by a special allocation of funds to the State. The Childrens Bureau is supporting the Health Service Program; the W. K. Kellogg Foundation, the School-Community Health Education Project. The State Board of Health was chiefly responsible for initiating the former and the Department of Education for the latter. In both, there has been joint planning and cooperative action. These projects have clearly demonstrated that if funds for a School Health Program are provided, there will be effective work. We shall need to rely on our own resources for our continuing program but it may be said with confidence, "with adequate support, we shall go forward."

STATE OF FLORIDA



What is Wrong With Mary?



What's wrong with Mary? Others would like to know too. Her teacher reports that she is "draggy, inattentive and often indifferent, although outwardly she appears well enough." Mary may be like hundreds of other boys and girls with some physical defect which is retarding them in school and play. She may have hookworm? No? Perhaps then, she has a crippled heart from an attack of unidentified rheumatic fever. Maybe. Or, again, her eyes may be under par, or the school room light is not strong enough or improperly adjusted. There are a number of things which may be wrong with Mary. That is why the school health program under the local health department is so important and necessary. The health officer in examining Mary will recognize "What is wrong with Mary" and check with her parents to see that she is referred to her private physician without delay.



Florida **HEALTH NOTES**

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The State Board of Health

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Governor of Florida

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Florida **HEALTH NOTES**

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C A N C E R C O N T R O L

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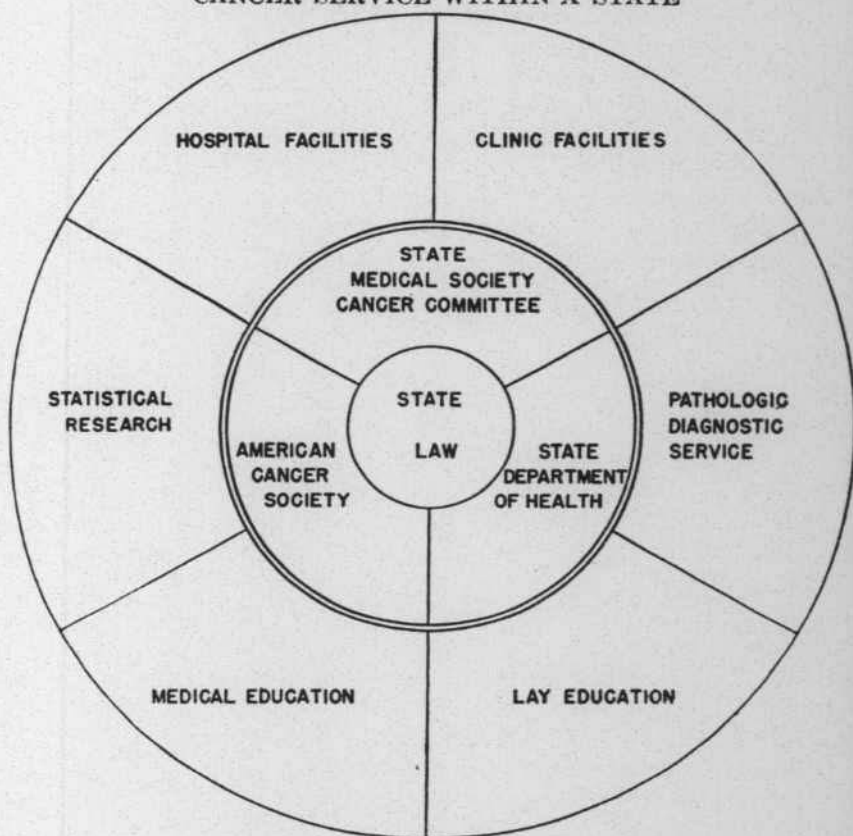
CANCER CONTROL

By
R. F. SONDAY, Director
Bureau of Preventable Diseases

At the beginning of fiscal year 1946-47, the State Board of Health received approximately \$40,000 as grant-in-aid funds from the U. S. Public Health Service for the development of a cancer control program. The number and types of cancer control activities to be carried on in the state are dependent upon local conditions, the cooperative efforts among various groups, the funds available, and the opinions of these groups as to the most effective way of spending cancer funds. The basic features of a comprehensive, fully developed program should include the following: statistical research; educational activities with lay and professional groups; the promise of adequate diagnostic and treatment facilities, including prevention or detection clinics, diagnostic and treatment clinics, consultation services, and tissue diagnostic services; an adequate number of hospital beds and special facilities and services for terminal patients at hospitals or in their own homes. A comprehensive cancer control program is pictured graphically in Figure 1.

Since the State Board of Health is the State agency responsible for looking after the health of the people, it is logical for it to assume leadership in the cancer field, unless the State Legislature has previously placed this responsibility with some other state agency. A cancer control law approved by the State Board of Health, the Florida Division of the American Cancer Society, and the Board of Governors of the Florida Medical Association has been presented to the State Legislature, and it is anticipated that the responsibility for cancer control will be delegated to the State Board of Health. In the absence of a specific law, the State Board of Health inaugurated plans for the development of a cancer control program so that the grant-in-aid funds made available in 1946 could be properly utilized.

BASIC ELEMENTS OF A COMPLETE CANCER SERVICE WITHIN A STATE



Cancer is not a disease which can be controlled by the specific efforts of one group or by one activity. To have a complete service in the state, there must be integration of effort of all organizations and individuals. The agency responsible for the state cancer program should be the stimulator and integrator of cancer control activities and should issue a complete practical program including statistical studies, educational activities, and the provision of clinical facilities necessary for rendering adequate prevention, diagnostic and treatment services to the public. When the cancer control bill has been enacted by the Legislature, the State Board of Health will be given specific duties and powers to control cancer.

These duties are as follows:

1. To promote the prevention and cure of cancer.
2. To establish a standard for the organization, equipment, and conduct of cancer units in general hospitals of the state.
3. To conduct an educational campaign for cancer control.
4. To provide a plan for the care and treatment of persons suffering from cancer.
5. To aid in the establishment of other suitable clinics which shall be deemed advisable to effect proper treatment and care of cancer patients.

Figure 1 depicts the basic elements of a complete cancer service program. The center of the circle indicates the state law establishing a program for the control of cancer. The next concentric section is divided into three parts indicating the three groups at work on this problem, and the outside of the circle is divided into six parts indicating a well rounded comprehensive cancer program. The development of a program requires close cooperation between the three groups at work on this problem. During 1946 excellent cooperation was received from the members of the Cancer Control Committee of the State Medical Society, the Board of Governors of the Florida State Medical Association, and from the component medical societies. The State Board of Health worked closely with the Florida Division of the American Cancer Society and due to this close cooperation, duplication of effort was avoided.

The planning and conduct of a cancer control program must be based on a knowledge of the extent of the cancer problem within the state. This requires statistical research or the systematic collection of statistics and the evaluation of results from year to year. To secure information on cancer morbidity, physicians and hospitals must report all cases of cancer as is now required by state law. To adequately define the problem, a cancer central registry should be established first for the following reasons:

1. It is only by revealing the actual distribution of the problem and by registering the presence of it in the form of reports that progress may be assured and evaluated.
2. It is the only way of obtaining an equitable basis for the distribution of funds to establish a completely rounded program.
3. It will arouse unprecedented medical interest and enthusiasm.
4. It will stimulate reporting.
5. It makes available thousands of detailed records of each

site of cancer for epidemiological investigation of etiological factors.

6. Follow-up reveals the need for hospitalization of many individuals who are not receiving adequate care.

By statistical research, careful analysis will be made of state cancer mortality statistics in order to determine the relative importance of cancer of the various sites of the body, differences in cancer among the sexes in different races, and in different sections of the state. It also gives essential data for us in evaluating the results of the program, a necessary step in determining its strength and weakness and need for revision.

A second important element in a state cancer program is educational activities. People must know enough about cancer to be on guard against the disease, to have periodic examinations and to seek medical care promptly upon the discovery of a suspicious sign or symptom. Any of the following symptoms indicate that something is wrong. They may mean cancer. **They should be investigated at once, since most forms of cancer are curable if treated in time.** The danger signals of cancer are:

1. Any sore that does not heal, particularly about the tongue, mouth, or lips.
2. A painless lump or thickening, especially in the breast, lips, or tongue.
3. Irregular bleeding or discharge from the nipple or any body opening.
4. Progressive change in the color or size of a wart, mole, or birthmark.
5. Persistent indigestion.
6. Persistent hoarseness, unexplained cough, or difficulty in swallowing.
7. Any change in the normal bowel habits.

Most of the educational activities thus far have been carried on by the Field Army of the American Cancer Society. They have done an excellent job and more and more people are becoming aware of the early signs of cancer and are availing themselves of frequent periodic medical examinations. Since educational activities are reaching all groups, physicians must be alert to the need for careful examination of their patients in order to determine early signs of cancerous or precancerous lesions and must be prepared to make available to patients the best diagnostic and therapeutic techniques. Since the dentist has such an excellent opportunity to note abnormalities or pathological conditions of the oral cavity, it is important that he, too, understand the relation of such conditions to cancer.

Since early diagnosis is of first importance in the prevention of death from cancer, pathological consultation is essential for reliable diagnoses. Tissue diagnostic services should be available in all sections of the state and this service must never be delayed or omitted because of the patient's financial status. Hence, the State Board of Health in cooperation with clinical pathologists of the Florida Medical Association developed a tissue mailing diagnostic service. The State Board of Health will bear the expense of the pathological diagnoses for all individuals certified as medically indigent by their attending physician. Containers for biopsy specimens, with appropriate data slips, have been made available and these may be obtained from the State Laboratory in Jacksonville or any of the cooperating pathologists. An initial supply has been sent to any health department, hospital, or clinic requesting same. This service enables the physician to secure an accurate pathological diagnosis on suspected cancerous or precancerous lesions. This service may be used to obtain a pathological diagnosis of any tumor. The material gathered by means of this tissue diagnostic service will be of great value in establishing a central cancer registry.

The education of the public to guard themselves against cancer will be wasted effort unless the necessary facilities are available to them. The third and last basic element in a state cancer program is the provision of adequate prevention, diagnostic, and treatment facilities.

Cancer prevention clinics have already been started in a number of cities, and in time will prove to be practical and of value. Many of the findings in the examinations in the cancer prevention clinics prove the need for such facilities. Many of the lesions found, if allowed to go uncorrected, might develop into cancer growths later. The establishment of an adequate number of cancer prevention clinics to provide examinations within a reasonable distance from all sections of the state, either at no cost or at fees adjusted to the means of all economic groups, is an essential part of a complete cancer service within the state.

A number of tumor diagnostic clinics meeting standards set by the American College of Surgeons should be established in proportion to the population or geographically so as to be within easy access of persons from all sections of the state. To meet the standards set by the American College of Surgeons, it appears that such clinics will only be feasible in the larger urban areas of the state. It is desirable, however, to have one diagnostic clinic for every 50,000 people.

Treatment clinics meeting standards set by the American College of Surgeons should be available in the same ratio to the population and the same group distribution as are diagnostic clinics. Whenever possible, both diagnostic and treatment services should be available at the same center. It is desirable to have diagnostic and treatment clinics developed at general hospitals. Treatment facilities necessarily include hospital beds. All cases treated by surgery and many of those treated by radiation require hospitalization for long or short periods of time depending upon circumstances in each case.

Since in most general hospitals there is not likely to be any special designation of beds for cancer cases, the question whether there are enough hospital beds available for cancer cases in any connection is largely a question whether there are enough hospital beds available for all sick persons requiring hospitalization. The most highly skilled cancer service may be expected to be found in the cancer clinic of a general hospital or in a special cancer control hospital. The question whether medical care for cancer patients can be better provided through establishment of cancer clinics or wards in general hospitals or in special cancer hospitals is one which must be determined in the future. The provision of adequate hospital facilities and medical and nursing personnel with specialized training in cancer is an important step in the improvement of the care given to the patient for whom it is recognized that no future benefit is to be derived from surgical and radiological treatment. Experts in the field of cancer know that after these means have become exhausted, there is still much that can be done to support the patient both physically and mentally, to make him more comfortable, and to prolong his life. This phase of the care of the cancer patient is one that often receives the least attention. The question as to where a patient will receive care is one to be settled individually in each case, as it involves the wishes of the patient and his family and their economic status, as well as the types of facilities available. The problem of providing institutional care of advanced cancer patients remains unsolved at the present time. The provision of facilities for advanced cancer patients is a necessary element in a complete organization of cancer services.

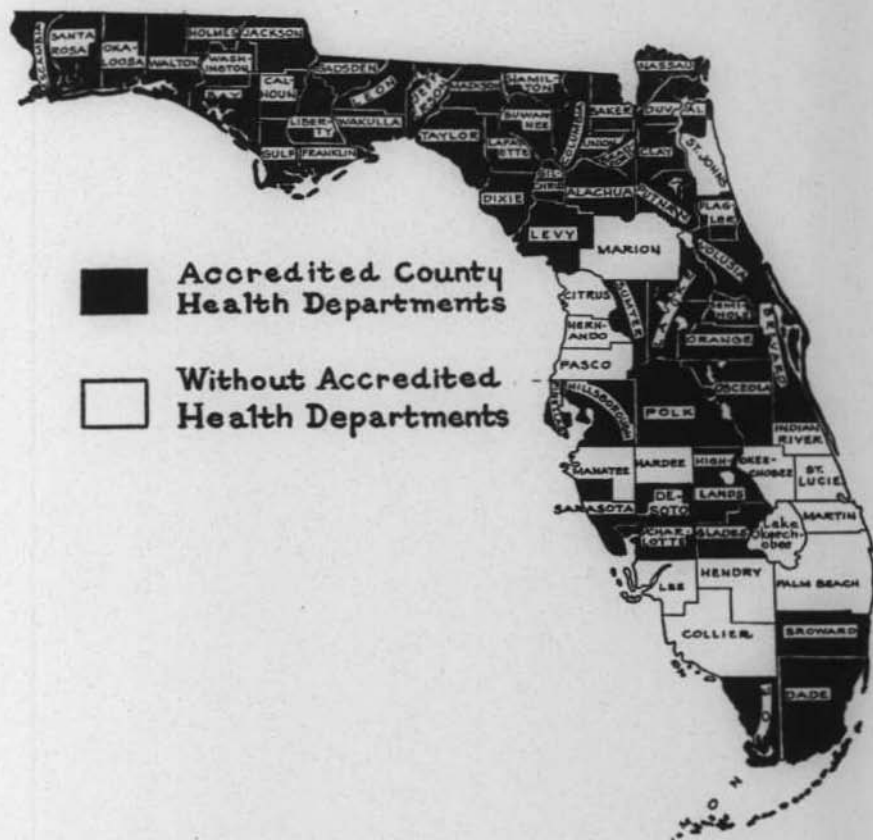
From the foregoing it is evident that there are many ramifications in the organization of an adequate cancer control program. To achieve this goal, it is believed that with the cooperation of the three groups responsible for cancer control activities, information and services outlined as the basic features of a state cancer control program will be made available to all citizens of the state.

SPECIFIED DISEASES BY COUNTIES, FOR THE MONTH OF FEBRUARY
(JAN. 25-FEB. 22)

		Cancer	Diphtheria	Dysentery-Ameb.	Dysentery-Bac.	Meningitis-Ep.	Poliomyelitis	Scarlet Fever	Syphilis	Tetanus	Tuberculosis, Pul.	Typhoid Fever	Typhus Fever	Undulant Fever	Whooping Cough
Alachua	38,245					1			32		16				6
Baker	6,326								4		5				
Bay	53,200								38		21				
Bradford	11,600								3			2			3
Brevard	20,750								20		1				
Broward	55,100						1	1	25		1				1
Calhoun	8,230								1		1				
Charlotte	4,470								1		1				
Citrus	5,427								6		1				
Clay	11,600							1	6						1
Collier	4,957														
Columbia	17,250								6		1				
Dade	336,300	41	2	1			2	12	67	3	46	4	1		50
DeSoto	6,854						2		5						
Dixie	4,926		1						1		1				
Duval	302,200		3				1	2	303	1	34		2		14
Escambia	118,900		1					1	40		6	1	1	2	1
Flagler	2,652								5						
Franklin	8,900														
Gadsden	31,041								32		11		1		
Gilchrist	3,466										1				
Glades	2,281														1
Gulf	7,040								5		1				
Hamilton	8,731										1				
Hardee	8,885								3		1				
Hendry	5,066														
Hernando	5,700														
Highlands	19,300								14						5
Hillsborough	220,100	21	10		1			13	134		41	2	8		3
Holmes	14,627								3		1		1		
Indian River	9,130								16						
Jackson	34,550								18		4				
Jefferson	11,066								1						17
Lafayette	3,995								1						
Lake	28,300							1	30		2				3
Lee	26,300								11		1				
Leon	37,100		1			1		1	32		7			1	2
Levy	9,902		2						10		2				
Liberty	3,193														
Madison	15,537								5						
Manatee	27,100								5						
Marion	36,900								18		1				
Martin	6,094								4						
Monroe	21,200								4		1				
Nassau	10,900								2		3				
Okaloosa	17,650		1						6		1				
Okeechobee	2,919								1						2
Orange	94,200		1					2	83		62				10
Osceola	10,800											3	1		
Palm Beach	126,700						3	2	139		10				1
Pasco	13,729								1		1				
Pinellas	147,300							7	26		7		2		
Polk	123,800	1	2					3	49		10				11
Putnam	17,837								12		2				
St. Johns	22,300								11		3		1		
St. Lucie	13,400	1							23		12				
Santa Rosa	17,400								1		5				
Sarasota	20,600								8						
Seminole	25,600								25		1				
Sumter	10,417								3		1				
Suwannee	17,800								9						
Taylor	10,738		1						1						
Union	6,051								25						
Volusia	61,600	1						1	38		4		1		
Wakulla	5,059								3		2				
Walton	13,871								3		1				
Washington	11,889								5		7				
TOTAL		66	25	1	1	3	9	47	1383	4	343	9	23	3	131

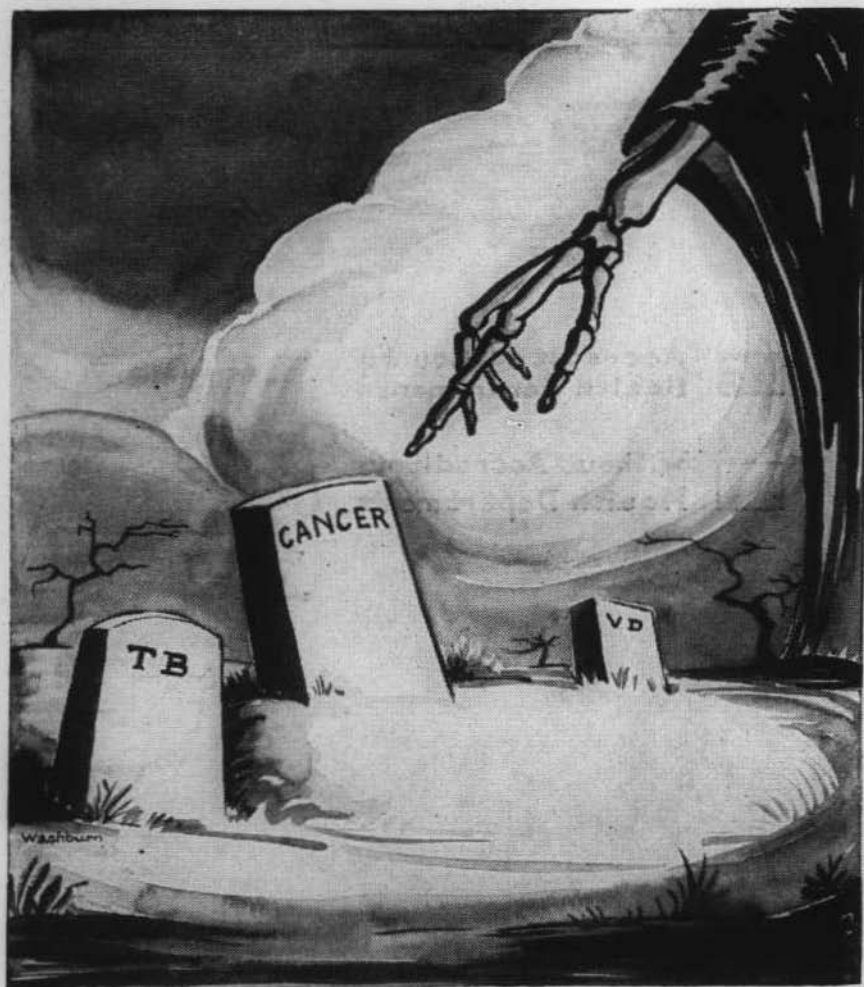
The above chart is a new innovation and will be released regularly from now on. It will not pertain to the text at any time.

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HN 5-46



Most cases of cancer can be cured when found in time, and considerable confidence is placed in the State Board of Health's proposed program to find, diagnose and in cases of the medically indigent, treat the disease. More than 2,500 persons died in the State in 1946 from cancer. Florida cannot afford this waste of life from a preventable disease.



Florida **HEALTH NOTES**

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JACKSONVILLE - MAY, 1947 - VOL. 39 - No. 5

PUBLIC HEALTH NURSING

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Please address all Health Notes correspondence to Ruth Stuart Allen, Editor.

Florida **HEALTH NOTES**

ESTABLISHED 1890

TO FLORIDA'S 330 PUBLIC HEALTH
NURSES WHO TAKE THE BITTER WITH
THE SWEET, WHO HAVE CHOSEN
THE PREVENTIVE FIELD OF NURSING
AND THUS DAILY FARE BEYOND THE
CALL OF DUTY TO HELP OTHERS TO
HELP THEMSELVES — THIS ISSUE OF
FLORIDA HEALTH NOTES
IS DEDICATED.

*Marion I. Righter, PHN of Hillsborough County, gracing the cover, typifies Florida's nurses "who take the bitter with the sweet." She is wearing a small cap-like hat which is not exactly uniform, but many of Florida's PHNs are currently in a state of "out of uniform" awaiting the adoption of a standard one which will be functional in the year-round climate. The following pictures show "ins and outs." As this goes to press however, word comes that a state-wide uniform has been decided upon, much to the delight of those who have been holding off investing in suits which are neither functional nor chic in a more consistently warmer climate than is enjoyed in most sections of the country. (Photo by RSA).

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You probably will recognize the young lady at the right for she graced the cover of Florida Health Notes in March. But because this is one of those good companionable pictures showing a youngster who, through a lifetime of experience, has learned that needles are friends in disguise, along with a nurse who obviously knows the value of certain fraternity with the children, we wanted to use it again. Picture was made in Caroline Brevard School, Tallahassee by RSA.

FLORIDA'S PUBLIC HEALTH NURSES

By **RUTH STEWART ALLEN**
Press and Radio Consultant
Florida State Board of Health

Breathes there a woman who hasn't dreamed of filling the glorified role of a Woman in White or of the honor of having the coveted initials "R. N." for registered nurse, follow her name?

In the dream of every girl hovers the picture of herself in the unselfish act of serving humanity. She sees the gleam and hears the rustle of the white starched uniform, inhales odor of blended flowers and ether; philosophizes about the struggle of the sick and their victory over, or defeat by Death. The Registered Nurse epitomizes the outlet for that great overflow of desire to do for others. She signifies the broad shoulders and the warm understanding heart on which the world can lean for physical help and mental release. Verily, she is the Angel of Mercy.

But the role of the registered nurse is not confined to the cool and mysterious halls of the hospital where hidden loud-speakers summons important Dr. Kildares; where quiet cool prevails and the gleaming white cleanliness clings protectingly, like a sanitary mantle, around the neat straight figure in cap and gown of fresh-ironed white.

This is the vision of the starry-eyed girl, of you and me, in the days when the great urge to answer a mythical call of duty was upon us. It is also a thumbnail sketch of the phase of nursing most familiar to the public. But the truth must be faced. Nursing, for all its lure and satisfaction, is a hard job which demands a greater-than usual capacity of tolerance for human adversities. It is a job for the Fittest. It is a job which in its many ramifications leads eventually into the atmosphere of privation and human weaknesses, and, contrast the surroundings of the bright, sanitary hospital—to filth and squalor. Visionary glamor too often becomes raw, rank realism. To the nurse who survives her imagination and introduction to the panorama of the nursing profession, goes the citation for Devotion Beyond the Call of Duty.

But this is not a story of "just nursing." It is the story of the specialized branch—public health. For the public health nurse the day's work may easily lead from a riotous, happy group of school children to a hovel where the husband drinks too much, the wife has too many babies and the larder is far from full. It may lead from the spotlessly clean home where a brand new baby nestles securely in its basket under the worshipful eyes of its meticulously groomed mother to a seventeen year old expectant mother who begs that her baby shall be delivered under the watchful eyes of "Ma"—in a three room cottage which is also home for five other children—small brothers and sisters.

Public Health Nursing may lead from the surly patient who resists one of the philosophies of public health control—prevention through home sanitation—to the motherly little woman whose only child is taking rabies injections—and who insists that a glass of iced tea and an easy chair are just what the nurse needs after a long hot day. No other phase of nursing so completely exposes the realness of life as does the public health branch. It reveals the clean and happy; the sloven and sick; the joys of day and the sorrows which rob sleep of its healing powers.

With these facts long established in your reporter's mind—with the vision of the glamorous side of nursing long ago tucked

away on a shelf—but also, with the realization that a day in the life of a public health nurse runs the gamut from cleanliness to filth, from happiness to sorrow. from personal dejection to high satisfaction, she decided to see for herself just what there is about public health nursing that gives to the individual Public Health Nurse “that satisfied look.”

It was a dank drizzling day when your reporter and a Duval County Public Health Nurse began the day's calling. We headed toward a small community clustered around an ordinary sized school which was bursting its seams with more than six hundred children. The school call was routine. Every nurse is supposed to call on the schools in her district at frequent and regular intervals. She was greeted and welcomed from the principal to the last teacher—with a broad smile from every child. Three of the children who had poor vision as tested by the teacher were referred to the nurse to be re-checked.

One youngster was sure she had mumps and must go home at once. Another had a suspicious rash and still another appealed for help to “get this hunk out of my eye.” A worried teacher reported that “Billie Jones” was ill and was found to have a high temperature, and Oh! dear, this is the day for his last rabies treatment.”

Billie's house was the next on our roster. We would have called there anyway. We carried x-ray reports on one of the youngsters. . . .

We found a young mother of five children . . . Billie about 12, was the oldest. And Billie was indeed a sick little boy. So was the 18 months old baby. And this is the picture of the “Jones” family.

The father, a former railway engineer, has been admitted to the State Tuberculosis Sanatorium for the past year—with tuberculosis which required major surgery. The company gives the family an allowance of \$45 a month. At one time the County Welfare helped. Also, at one time the children received free school lunches. But not now. In one day, a few weeks ago, this mother received three messages:

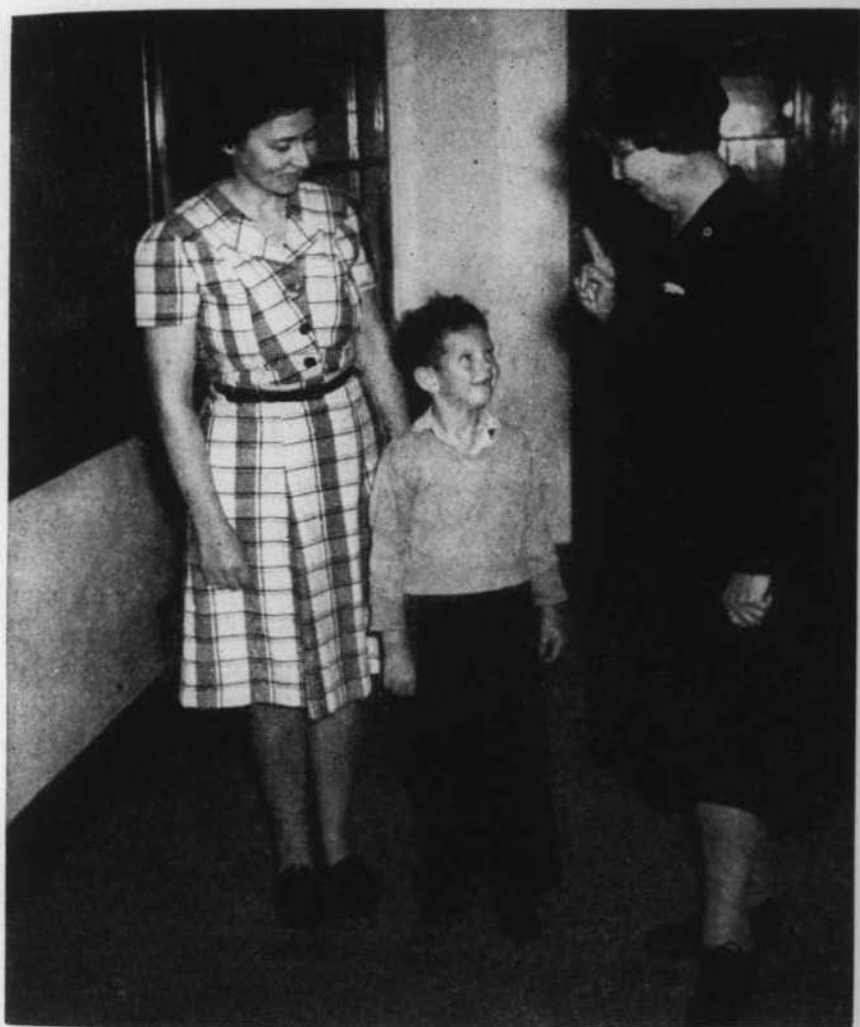
- a. She had been dropped by the County Welfare (but referred to the State roll).
- b. Her children would not receive any more free lunches—money cut off from Washington.
- c. Her husband had suffered a relapse after his last operation.

After taking Billie's temperature—and the baby's—the nurse gave instructive to the mother "these children must have fruit juices!" But there was no juice; nor money to buy it with. The railway check was three days overdue—the church had given Mrs. Jones a pantry shower, but it contained, mostly, canned peas. . . . Her only salvation was to try to swap peas for juice at the neighborhood grocery.

But the mother was not dismayed. She smiled, chatted and generally kept a stiff upper lip. Because she couldn't leave the two sick youngsters we made arrangements with a neighbor to take both of them to the County Hospital. We also called on the minister to see if some further help might be available from his parish. Then with a sigh, we stopped at a little eating place, refrained from talking about the Jones, washed our hands, and ate heavy lunches with little appetite.

But the Jones family was not to be pushed from our minds. The teacher of the second oldest boy stopped to compare facts. Did you see Johnnie Jones this morning? asked she. . . "I'm worried about the boy. He's losing weight by the day, looks peaked and is falling behind in his classes. Honestly, I believe he isn't getting enough to eat. . . I know they don't have too much, but I'm sure Johnnie is deliberately doing without so his brothers and sisters may have more." In our minds we see the cupboard at the Jones house stocked with eight cans of peas—the lone bunch of collards on the table which a neighbor had brought, a half loaf of bread—and the check from the Railroad Company in the great amount of \$45. three days past due.

Oh yes! The x-ray report—the original reason for calling on Mrs. Jones. . . . The picture of the little girl who had primary tuberculosis showed improvement. The mother's second x-ray



Here is one of those unique young men with the courage to swap a yarn or two with the PHN. Most of the bravado however, is due to the nurse because a large portion of any public health nurse's success lies in her ability to get along with people from the tiniest to the biggest and the youngest to the oldest. Picture was made at Oceanway school with youngster's teacher and Duval County PHN by RSA.

was clear as a bell. The whole family looked better from the chest level point of view.

Yes, the public health nurse will go on calling at the Jones home for a long time to come. And she will also go on performing little beyond-the-call-of-duty jobs to lighten the physical and mental burdens of Mrs. Jones and many others like her.

The rain had slackened and we ventured down a muddy road to call on a pregnant negro woman whose blood test had shown positive for syphilis. But the road was torn up in front of the house. . . . There was a path which led along a deep ditch—full of water—to the back—and down that path we lurched.

Eliza was hanging up clothes, and because it was impossible for us to cross the ditch, she came to meet us. . . . And so as we called across the water, another duty was crossed from the Nurse's roster of calls. Of course, Eliza was sure there was some mistake. . . . "I never known I had any bad blood, but I show will come to de clinic." . . . and another future baby was probably saved from possible early death, feeble-mindedness, and many other probable malformations.

Lujeania, a huge negro girl with a mouth full of gold teeth, was next on our list. . . . Lujeania was the proud mother of twin girls—from the "last time bein' that way," but the new baby—a bouncing boy who "save my neck 'cause my man he sho wanted a male child," was indeed a boy of some proportions.

And once again the Nurse took off her coat and hat, spread paper over the table on which she placed her bag, washed her hands and put on her apron . . . a routine procedure, no matter where. The baby who had been delivered by a midwife was carefully checked. His band was changed, his little belly button was protruding and taping was necessary—a condition so often found in colored babies, your reporter was told. Lujeania had done an excellent job of keeping the little tyke dry and clean. . . . He was "a fine male child." The mother's urine was finally tested, and with urging her to come to clinic "next Thursday" for her six weeks' postpartum check-up, Lujeania was well on the road to being dismissed from the roster.

Another parting promise was that Lujeania would also get her other four children to the clinic for their "shots what my man don't like none, much."

Only four calls for the entire day, your scribe asked? And then realized that she was tired to the dropping point, while the nurse was still fresh, in a good humor, and ready for more calls. Time, however, was running out. And records had yet to be completed. Just one more call, she promised. . . . This was to a white home. Its main purpose was to urge the mother to bring her youngest, a fifteen months boy, —and still nursing— to the clinic for his diphtheria, whooping cough and tetnus injections. Here we found the oldest daughter, a senior in high school, ill with flu. Another of the seven youngsters was "puny, ain't got no appetite, somehow," and the baby had a very runny nose. The mother was apologetic. She knew she hadn't done as well by the baby as by the other children. They had had their protection early. . . . "But I get such faint feelings when I get in a crowd." And then with a little blush which brightened her sallow face, "I'm kind of a shame to have folks see this Thing a nursin'."

That night a procession passed through your reporter's dreams. The two sick Jones children crying for orange juice. The little boy who was peaked and wan because he was giving his food to the small children. Lujeania's big gold teeth . . . The honest amazement in the expectant negro's eyes when she learned that she had "bad blood." The little boy who continued to tug, tug at his mother's flabby breast. But when I met the Nurse next morning for another round she "had rested well." She had been up since six o'clock, however, in order to inquire about the Jones children who were now in the County Hospital. Billie with pneumonia and the baby "saved just in the nick of time." She admitted, too, that her fried chicken of the night before hadn't been quite as tasty when she thought of the lone bunch of collard greens and the half a loaf of bread in the immaculate Jones kitchen. She also admitted that instead of peas, which she had originally planned to serve, she had substituted another vegetable. . . . And so goes a day in the life of a public health nurse.



When this picture was made neither of the above children had been immunized. All the blame cannot be laid at the proud parent's feet however, because they live miles from a health center, have no transportation. Because Duval County covers the whole "north forty" far removed from clinics, local public health nurses are constantly ferreting out such families and try to overcome the transportation problem indirectly by educational tactics. Two days after picture was taken the mother, weary and bedraggled from the six mile journey which entailed catching rides and a stretch by foot, and with a child on each arm, presented them at the clinic for their future protection through immunization. (Photo by RSA).

Another day and another school. But no youngsters had been screened by the teachers for the nurse to check. One teacher, however, urged that we call on a child who had a badly cut foot, had been sent home because of the red streaks which were shooting up her leg.

But the first home call of the morning was to see a new baby—(three months old) who hadn't yet been brought to the well baby clinic for immunization. Nor had the mother had her six weeks' check-up. She complained of "that bearin' down feeling." And here was a mother with six children—living in a two room house—slovenly dirty. The children, none of them in school because the school bus does not go that far off the road, were even dirtier—clustered around, each having his turn at making little brother gurgle with his baby laughter. Seems as though one thing and another had prevented the mother's taking the child to the clinic. And one had to admit that transportation six miles from the small village was a problem.

There were only two beds in the house, neither "made up," dirty dishes cluttered the kitchen, but with all, your reporter's chops watered at the smell of dried beans and wild greens boiling merrily away on the little four-eyed cook stove.

In delight the young woman, for young she was, and pretty, too, reported that her husband, who had been drafted even with a large family and sent overseas, was now home, had his old job back and the sun was shining once again.

The nurse reported that she, the mother, had faithfully brought all the other children to the clinic for their immunization protection and general checks, that if she weren't so "do-less" about the house, would clean up a bit, she'd be a reasonably representative patient.

We pointed the car at a thicket of runty trees and stepped on the gas. Miraculously it seemed to open and a bit of road snaked off through the shrub. On and on we ploughed for another new baby and proud mother were waiting for us at the end of the three mile sandy stretch. A child was also reported at the same home with whooping cough.



Here is a young Negro mother who "wanted to git my younguns started before I gits too old." According to the Duval County PHN she is doing a grand job both in "gittin' started" and with the care she is giving her coveted family. The four oldest children have all been immunized and are in excellent health. The day the nurse and your reporter called the baby was six weeks old. Next day the mother arrived at the clinic for her scheduled six weeks check-up. Nurse declared that an excellent job of keeping the new baby dry and clean was evident; pronounced the beaming mother "a good one," and all were happy that day. (Photo by RSA).

A snake, and then another, slithered across the road (we ran over one) and suddenly, squarely in front of us, was a gushing creek . . . an innovation since the day, three weeks ago, when the nurse had driven the road. . . . We took mental soundings and cautiously maneuvered the car into the muddy water. And for several feet we maneuvered successfully. But then . . . the engine sputtered, coughed and gave up the ghost. We were drowned out!

When your reporter opened the door, water flooded the car. The swift current had literally eaten away the sandy, smooth roadbed. When the water should have been a foot deep it was nearer to three.

After surveying the sorry situation we began to follow the sound of voices and the chop, chop of an ax. . . . There we found help. A heavy truck pulled us out . . . backward—. We were saved!

The car was left to dry out and we headed on afoot. Soon we came to a little white cottage nestling in a well kept yard and surrounded by protecting, small scrubby trees. The usual dog greeted us and we were ushered into the presence of the new wonder—the fourth child of the family. And indeed here was an infant! Just home from the County Hospital the day before. . . . The mother, a pretty, but worn looking woman looked down upon the child with warm brown eyes. We could think only of a mother dog nuzzling her babies, happy at this wonder of life.

As always when the nurse was making any sort of inspection she went through the routine of taking off her hat, spreading paper on the table or chair on which she placed her bag, washing hands, putting on apron. A bit of the umbilical cord still clung to the wee one's navel, otherwise it looked in the pink of condition. Pink is said advisedly, because pink it was!

The house was spotlessly clean. The other children, none of them in school because of transportation, were clean and well-fed-looking . . . The child with whooping cough could be heard in the back yard "Whooping it up." The nurse went out to look her over while your reporter gave with her favorite bread and butter pickle recipe. . . . For considerable company was on hand to

see the new baby and tall tales were being passed about in the vein of "when my last one was coming I sure craved pickles."

The little girl with the cut foot, whose teacher had been so worried about, reclined in a studied pose on the couch. . . . In her mind she was a very sick lady. She had been the object of much attention at school for the report was about that "Gracie has blood poisoning." There is a possibility, too, that Gracie just might have had blood poisoning but for a mother who showed considerable horse sense. . . . The second the child had arrived from school the day before, the mother had put the foot in hot epsom salts water and at regular intervals had supervised the soaking for the past fifteen hours. . . . The foot, with a nasty cut picked up when Gracie jumped from the porch and grazed the sharp corner of an orange crate, was well on the road to recovery . . . gone were the "red streaks up her leg" and it was ready for a dose of treatment from Old Mother Nature.

An interested listener to the nurse's soft modulated voice and conversation with the mother was a very young soon-to-be-mother—a daughter-in-law. She was under the care of a private physician, would have her baby at a hospital . . . but she had a problem—perhaps the nurse could help. . . . She had been promised a baby bed, but plans had fallen through. . . . She couldn't afford a bed just now, and did the nurse think it would be all right for the baby to sleep with the mother?

Of course, the answer was NO, and a half hour was spent explaining how a bed could be concocted in a large pasteboard carton or an orange crate. . . . The mother-in-law rose to the occasion, said she had seen the very sort of box at the grocery store the day before—would help fix the bed.

Your reporter wondered how things ticked a few miles South and with a long standing invitation, headed for Alachua County where it didn't take long to realize that folks are folks and that public health problems exist wherever folks be.

With oh! such a pretty nurse the "round and round she goes" visiting started all over. . . . Mrs. G. must be seen. She has two children, the third is due shortly. She has been on the verge of miscarrying. . . . She lives from relative to relative and the last



Nobody could have been more surprised than this gracious mother when the Alachua County PHN and your reporter rang her doorbell. Obviously this was not a case demanding the attention of the health department. But every baby born in Alachua County receives a routine call by a PHN just as a matter of keeping the birth records straight and immunization on an even keel. Baby was delivered in a hospital by a private physician, is now six months old. Nurse is out of uniform waiting for state-wide decision on standard dress, which has since been reached. (Photo by RSA).

time she had to stay in bed a week the relatives got pretty well pushed both for disposition and room. Her husband had been in Raiford for three years so no relief could be hoped for there. (Nurse was quick to explain that he had been home on some sort of parole last fall). The second child has primary tuberculosis, but is being looked after fairly adequately by an aunt in the country.

Mrs. G. was not at her sister's home. She was not at her aunt's. She was not at a friend's. Two more stops were made, but Mrs. G. was not located. She, an indigent, was to be delivered by caesarean—probably has been by the time this goes to press . . . but she will be allowed to remain in the hospital only a minimum of time. Where Mrs. G. will take herself and infant from there is anybody's guess. The nurse's only consolation was that both current children are completely immunized.

It was a hot day with sand flies in their glory. We had driven farther in our quest for Mrs. G. than we realized. We were thirsty; we were hot. We were fly bitten. All this was borne in waves upon us when a long sigh sizzled from the rear right tire, and it collapsed as flat as a pancake. But this time no friendly voices came over the air. No axes chopped, chopped. No Samaritan passed our way. With sweat upon our brow and shoes full of sand . . . your reporter pulled her's off . . . the tire was changed and work and day again moved on.

The next stop gave us courage. It was in the outskirts of Gainesville. A small pretty woman, in shorts, her hair tied in a bright kerchief was in the middle of spring cleaning. We virtually leaped from table to chair, to dresser and sofa to get through. . . . She, too, had a new baby, but not too new.

This baby boasted a private physician, was delivered in a hospital. Its mother was probably surprised to see a public health nurse. . . . In fact, a nurse might never have called at that home but for the fact that *a routine call is made on every child born in Alachua County*. It enables the health department to keep track of the children for well baby and immunization clinics, and with this procedure the supervising nurse, Miss Louise Kincaid, believes that the routine checking of schools will

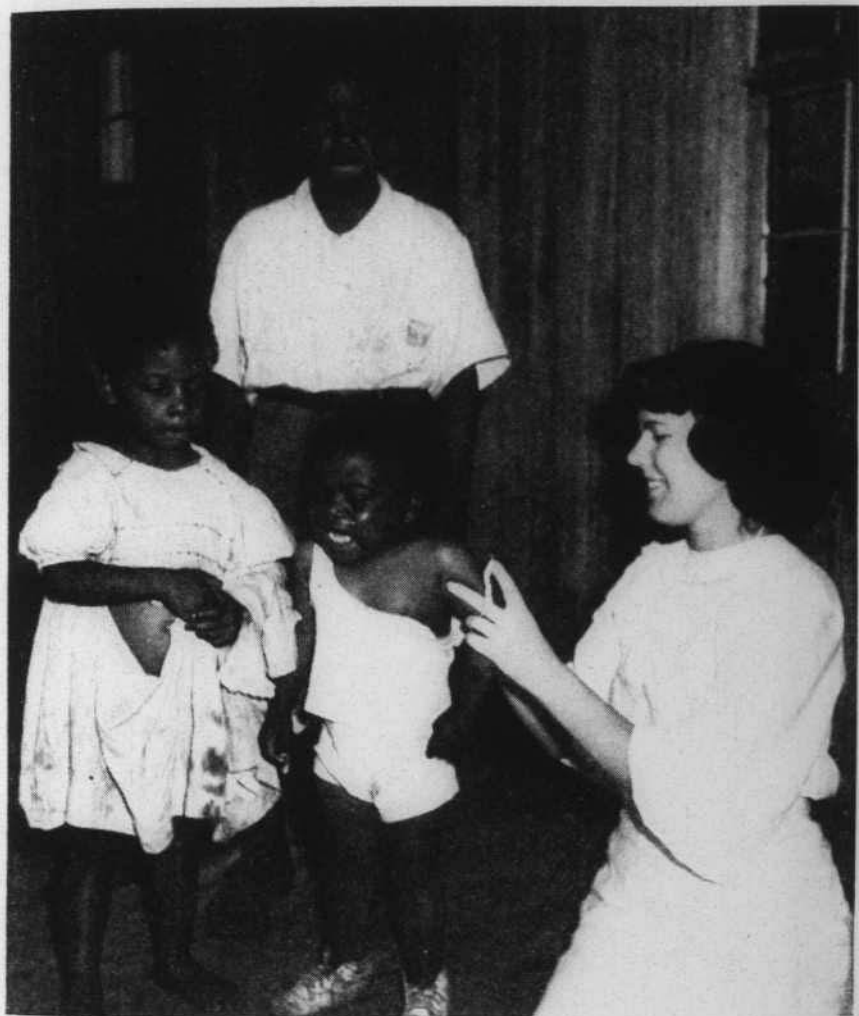
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This little brood's mother is in the State Sanatorium but it is obvious that sister has a mother-hen instinct and is looking after baby brother—who isn't liking the idea of having a tuberculosis patch test—much. Mother's condition was found through a mass x-ray program in Alachua County when she was three months pregnant. Because the father works late and the children are looked after by a cousin across the street, we had to do a "survey" to find someone to bring the little tyke to the clinic "next Thursday" to have the results of his patch examined. There is also another child, a baby, cared for by an aunt in the country. (Photo by RSA).

eventually be reduced to nil because of the early contact with new babies. No, the mother hadn't had the baby immunized yet, but the health department's second notice, the six months' one, came the day before and she promised to see her physician within the week.

Then came golden reward. We looked tired. We were. "Do sit down, I'm tired, too," she insisted, and so, for the next fifteen minutes we drank coke, ate cookies and rested with delight. Verily, a day in the life of the public health nurse is unpredictable.

The supervisor had insisted that your reporter sit in on the Red Cross Home Nursing class. There were two reasons. First, any plan which tends to help relieve the acute nursing shortage is dear to the public health nurse's heart. Second, two and three public health nurses from local health departments over the state are sent to the State Board of Health's In-Service Training School under the direction of the Alachua County Health Department (Gainesville) every two months for refresher courses in public health nursing. These refresher-enrollees help with the Red Cross classes—will eventually return to their home counties and hold similar classes.

This we did—we saw revealed before our very eyes the mystery of those neat, square sheet corners—(your reporter went right home and behold! she could do it, too). The linen was changed while a supposedly almost unconscious patient was rolled and heaved, sometimes gently and sometimes within an inch of hitting the floor. Her pillow was punched and made comfortable in the accepted manner and a special box pleat was manipulated into the sheet—too room for the patient. It was all a revelation and the mundane job of making a bed changed its spots—Some.

All at once it was the end of another day. That night your reporter didn't dream. But she did eat the biggest meal in town. Took the hottest bath. Fell into the softest bed and slept the soundest sleep that has ever been slept in twelve short hours. The routine of a Public Health Nurse was taking its toll.

But another day dawned, and by nine o'clock we were again hard on the trail of public health control.



By the time this goes to press this seventeen year old expectant mother of Alachua County will have delivered her first child. Through her mother's insistence she will have her baby in a hospital because in the vernacular of that wise woman. "Look at me, all that's wrong with me today is that I didn't have any care when I was 'that way' with you kids." The daughter first came under the scrutiny of the health department when she took her little brother in for a routine x-ray. It was through the department's urging that she finally consulted a private physician and decided not to have her baby at "Ma's." (Photo by RSA).

Here was a seventeen year old, eight months pregnant girl. Her husband gets home "now and then." She lives with her folks and five small brothers and sisters. She is the oldest.

She's a cheerful looking, red faced blond, barefooted and seemed comfortable enough. She will be delivered at a hospital and returned home after 24 hours . . . all against her wishes. The idea of a hospital delivery room is frightening, a mysterious place, and she wants "Ma" to be within calling distance. But Ma says "No . . . you'll have your baby at the hospital. Look at me, all that's wrong with me today is that I didn't have any care when I was 'that way' with you kids."

About a baby bed . . . there was no money for new fangles like that . . . but a compromise was soon reached whereby the old standby—the orange crate, would be converted into a haven for the coming baby. The nurse promised to stop a few days later and show how to line the crate and make a really comfortable bed for the little stranger.

But the seventeen year old prenatal wasn't the only one in the family in which the nurse was interested. Her seven year old brother with primary tuberculosis was scheduled for another x-ray at the health department "day after tomorrow." And so life moves on with a public health nurse, with one patient leading to another; with the network of public health control spreading from home to home, until the day when maternal and infant death rates shall have fallen, when hookworm, through home sanitation is controlled, when pinched faced youngsters will have blossomed and well nourished children shall romp and play.

Nearly two years ago, before the law that every expectant mother shall have a blood test was effective, a young Alachua County Negro woman was found to have tuberculosis through a mass x-raying program. Routinely she was also blood tested. She had syphilis . . . She had three children. She was also three months pregnant. She has long ago been accepted at the State Sanitorium and is progressing "satisfactorily." The baby was born in A-1 condition because of this nick of time prevention through which the mother benefitted. It was to the place which her husband calls home and where he makes some semblance of



A perpetual school for expectant Negro mothers is held in Alachua County. The individual may begin at any class and be "graduated" when the course has rolled around to that particular lesson again. At finish the enrollee is given a certificate to show that she has attended all classes. Among the subjects are pointers for preparing the layette, diet for the mother and other points to make her as comfortable as possible, exercise and finally, care of the new born baby. A number receive their diplomas every week. (Photo by RSA).

effort to maintain the three children that we went. An aunt keeps the baby. A cousin who lives across the street helps look after the other three. All have been immunized but for some reason the middle child hadn't had a tuberculosis patch test. This was the object of our visit. We don't know the result of the patch—we scoured the community to find someone who would bring the child in at the appointed day for the doctor to examine any possible reaction. The father works too late. All three children are the picture of health. And every effort is being made to keep them that way against the time when their mother will return and again draw the little brood around the family hearth.

Down at Miami we called on a good-looking girl, an expectant mother and one of the remaining few who drift in on the EMIC program. She had attended clinic regularly . . . hoped to move out of her trailer home into "just any sort of a house" before the baby arrives . . . showed us the layette . . . is looking forward to the third member of the family, a house, and a bit of down-to-earth living.

A VD patient was visited to see why she wasn't returning for her routine treatment. She was sullen but the nurse bet dollars to donuts that she'd show up all right. Another TB infected family was inspected—all were doing well under the watchful eye of the health department and returning regularly for their routine x-rays.

At the corner drug store we had an urgent message to come to a certain house at once. A baby was seriously ill. But when we arrived there was only a mildly sick child . . . on the mend from a serious cold . . . but the 10 year old brother, fearing that their family physician wasn't taking proper care of little brother, and recognizing the nurse from her last school visit as she passed him on the street, left word for her to go by the house . . . But Quick! Thus, the seeds of confidence in the wonders of the public health nurse are planted early.

Your scribe tagged along while the nurse made all preparations for a well baby clinic. Every tray, every needle, every bit of equipment was properly sterilized and made ready for the



The "patient" looks a little worse for the wear here but it was expected that she'd survive. Scene is of Red Cross home nursing class at Gainesville. Second lady from left is public health nurse from Washington County who is taking a refresher course at the State Board of Health In-Service-Training School under the direction of the Alachua County Health Department. When she returns to her home county she will hold similar classes through her local health department. (Photo by RSA).

physician who would conduct the clinic. Every nurse has to take turns at being a clinic assistant, come clinic days in her district. More than 60 Negro mothers lined up with bright eyed little tykes for inspection that afternoon . . . to begin or finish their immunization courses . . . to hear Doctor say "That's a fine young baby."

So much has been said these past months about school health programs and examinations that your reporter felt she should observe a bit of screening . . . the weeding out of youngsters by nurse and teacher before the health officer arrives to look the children over—giving them a clean slate, sending them to their private physician or to specific centers where indigent treatment is available.

Because we had heard a lot about the Pinellas County system of school examinations whereby the nurse is relieved of considerable routine work, and in turn where every teacher plays a greater personal part in the health program, your reporter took off for St. Petersburg. And this is the way the nurse functions in the Pinellas County school examination program.

But first, however, let me explain that the Pinellas Brand, although considered highly satisfactory, is also new but beyond the trial balloon stage. Pinellas is the only county using the particular routine which was worked out in detail by local public health nurses and teachers with the aid of a State Board of Health nurse consultant. Both schools and health department, however, swear by the effectiveness of the streamlined procedure.

Here, we found a special sort of comradeship between nurses and teachers, although on other school calls there had been no lack of friendliness and cooperation between the nurse-teacher combine. Still, here in Pinellas the teachers seemed to feel more responsibility or perhaps it was a tinge which comes from being an important working part in an important function.

All student health records are kept in the individual school. The first grade teacher originates the record and the twelfth grade mentor closes it out. It is transferred from school to school as the pupil progresses.. Nobody but the teacher and nurse concerned makes any entries on the record card.



This Dade County public health nurse is getting all equipment ready for a well baby clinic—to which 60 bright eyed little Negro tykes were presented by proud mothers ranging from 17 to 50. Every PHN serves as clinic nurse at the various routine clinics in her particular district. Note her smart dark blue uniform toned up with a crisp white collar. (Photo by RSA).



Here is one of Dade County's Negro public health nurses—and there are many in the State—calling on a pregnant patient and urging her to be more punctual at the clinics. (Photo by RSA).

Every child entering the Pinellas County school system for the first time must either present a card showing a complete physical check-up by a private physician or, when this is not possible, then must be seen by the county health officer. . . . And all information reported by either doctor is entered on the child's record and always maintained in his particular school room.

It's a busy time for both teachers and nurses during the first two months of school. The teacher does a complete routine screening such as testing eyes, hearing, inspecting teeth, weight and measurements, while the nurse follows up with any necessary immunizations.

The nurse then checks the youngsters screened by the teacher. . . . This routine over, the team sits down together to compare notes and decide which children shall see the health officer on his visit, and also which youngsters need follow-up home visits and so on. In extreme cases the parent is called on by the nurse and invited to come to the school for a roundtable conference about her offspring.

The last roundup in school health examinations is the visit of the health officer who examines the children mutually decided upon by nurse and teacher. . . . In his routine check, however, he gives more than usual consideration to the heart of each little patient.

The only records kept in the county health department are those maintained by the nurses of cases needing follow up calls. When completed, however, they are returned to the teacher for filing. There is a card on every child in every school in Pinellas County, filed in his individual room, showing his complete health status. Every child is accounted for so far as the Pinellas county health department is concerned. The teachers like the idea, too, of being able to turn immediately to a file, read the background of one Jimmie Smith and proceed from there.

Mrs. Martha Stetson, Supervising Nurse, and the staff nurse with whom I visited were enthusiastic about the system because they declared that it allows more time for necessary home visits in follow-up cases and therefore enables individual nurses to



Nurses and teachers in Pinellas County swear by their system of screening children and keeping the records minutely up-to-date. Teacher opens the record of child when he first enters school and teacher in twelfth closes it out. All records are maintained by individual teachers and are passed along as children progress in school. Here a PHN is checking report of teacher on a child whose mother will be invited to the school for a three-way discussion of the youngster's particular problem. (Photo by RSA).



In Pinellas County the teacher gives her pupils "the going over" first, refers some to the PHN who in turn refers some to the health officer. Here a teacher is obviously having a look-see at this little girl's toothies which seem to be having some trouble coming through. (Photo by RSA).

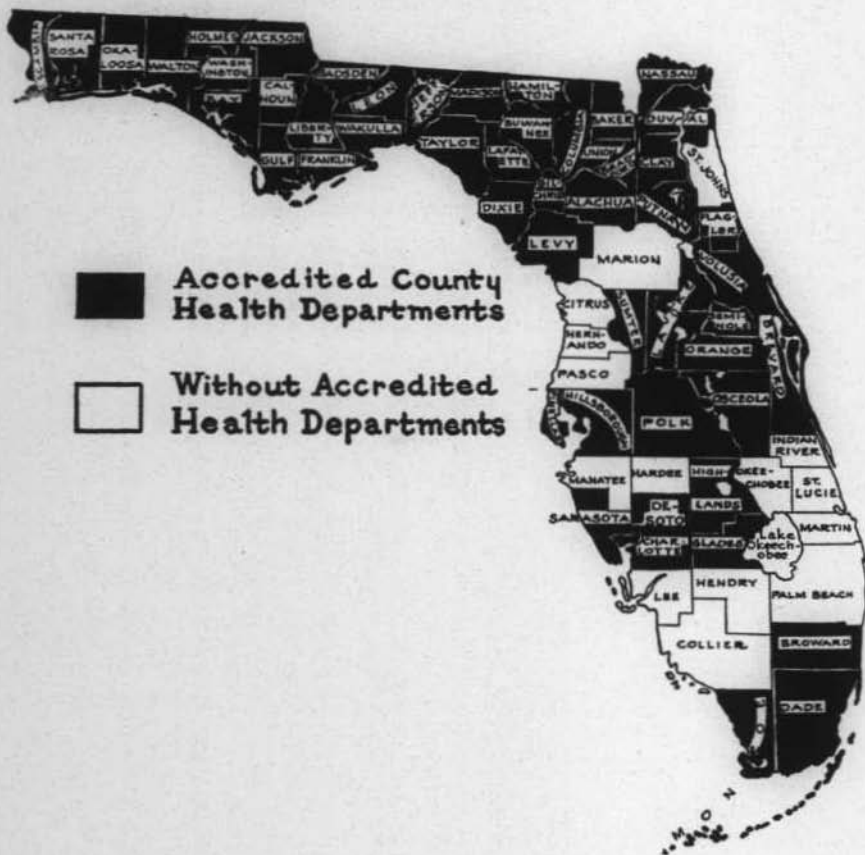
spend more time with the mothers. They really get to know better, the background of the home and the peculiarities of the individual case. It also allows final examination emphasis to be placed on children needing it rather than a ceaseless repetition of routine examinations on all children, many of which present no problems, physical or social.

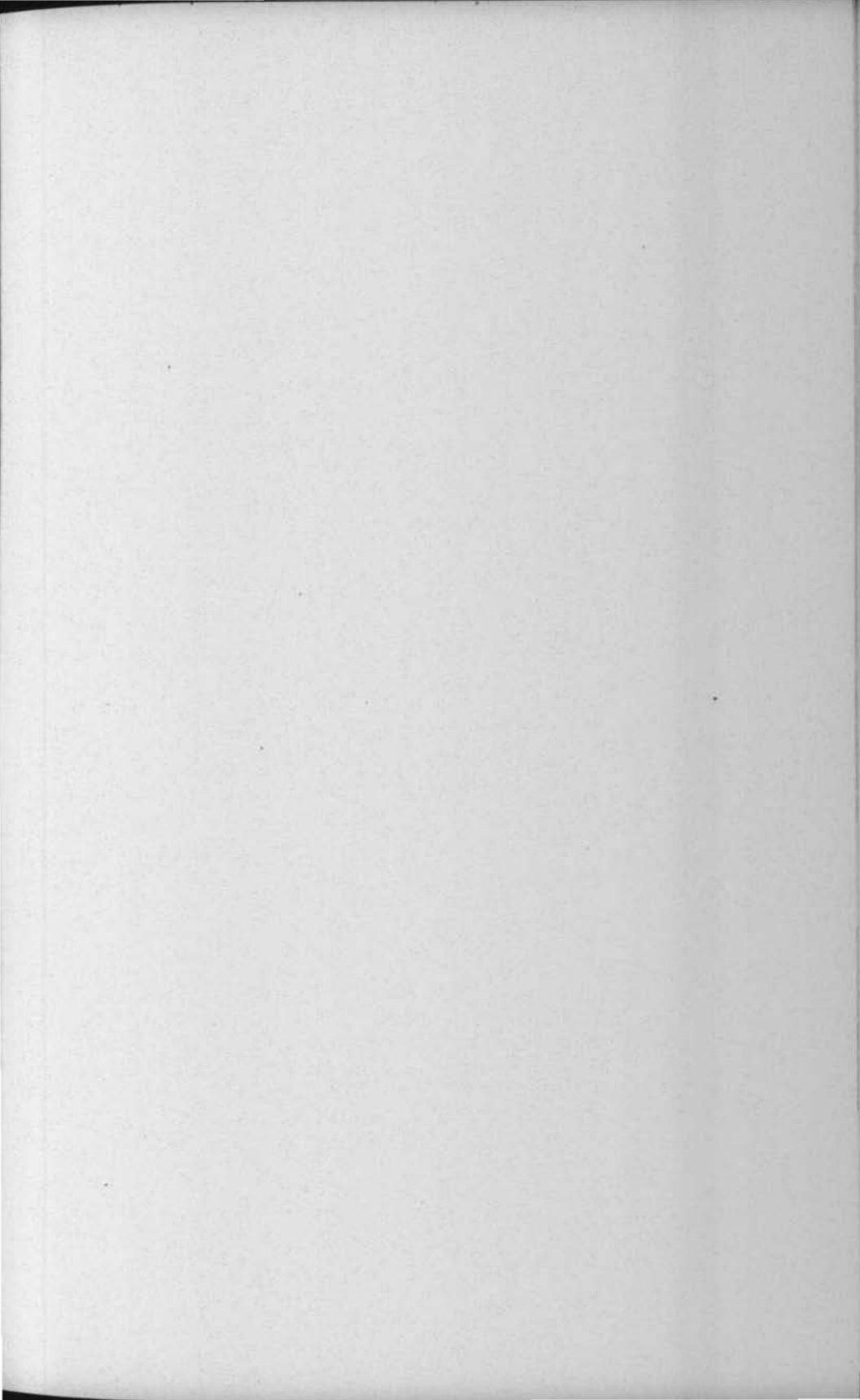
And so, after more than a week of making house to house calls with a variety of public health nurses, your reporter feels that she has seen a wide sample of public health nursing problems from north to south and to the west coast of Florida. She saw the happy, the helpless, the sloven and the ambitious. She saw the nurse be lenient and firm, worry about an individual family or laugh about the antics of an individual. Public Health Nursing presents a panorama of human frailties on one hand and of humans with the will to do or die on the other. It is a panorama which would break the weak, but it is also a panorama of challenge and of service. . . . It is a job for the Fittest and to the public health nurse who survives this challenge goes the citation for "Devotion Beyond the Call of Duty."

**NUMBER OF CASES OF SPECIFIED DISEASES BY COUNTIES,
FOR THE MONTH OF MARCH
(February 22nd-March 29th)**

	Estimated Population	Cancer	Diphtheria	Dysentery—Ameb.	Meningitis—Ep.	Polio- myelitis	Scarlet Fever	Syphilis	Tetanus	Tuberculosis, Pul.	Typhoid Fever	Typhus Fever	Undulant Fever	Whooping Cough
Alachua	38,245							45		24				
Baker	6,326							3						
Bay	53,200						1	68		11	1			
Bradford	11,600							12		11				1
Brevard	20,750							18		2				1
Broward	55,100	3						49		8				1
Calhoun	8,230							2		2				
Charlotte	4,470							1						
Citrus	5,427							6						
Clay	11,600							20		5		1		
Collier	4,957							4						
Columbia	17,250							19		2				
Dade	226,300	50	3	2	1	2	24	121	1	40	1	2		94
DeSoto	6,854							7		2				
Dade	336,300	50	3	2	1									
Duval	302,200		2	1		1	5	400		24			1	24
Escambia	118,900		5		1		1	58		15		1	1	
Flagler	2,652							16		1				
Franklin	8,900							10						
Gadsden	31,041							31		1		1		
Gilchrist	3,466							1						
Glades	2,281							5		1				
Gulf	7,040							14		2				
Hamilton	8,731							2		1				
Hardee	8,885													
Hendry	5,066							4						
Hernando	5,700							8						
Highlands	19,300						1	20		1				7
Hillsborough	220,100	28	5		4		16	193		24		2		10
Holmes	14,627							4		1				
Indian River	9,130							9		3				
Jackson	34,550							9		10				
Jefferson	11,066							2						2
Lafayette	3,995									1				
Lake	28,300		1					49		2		1		9
Lee	26,300							23		3				3
Leon	37,100	1			2		1	106		4			1	
Levy	9,902							5		3		1		
Liberty	3,193													
Madison	15,537							5		4				
Manatee	27,100		4					6		1				
Marion	36,900		2					28		6				
Martin	6,094							4						
Monroe	21,200	1	1					11		2				
Nassau	10,900							10		4				1
Okaloosa	17,650							1		1				
Okeechobee	2,919							4						1
Orange	94,200	1				1	2	104		29				10
Osceola	10,800							6		1		2		
Palm Beach	10,800	1			1	1	2	189		11	1			1
Pasco	13,729							11		1				
Pinellas	147,300						5	49		13				
Polk	123,800	3	7			1	3	91	1	34	2	5		4
Putnam	17,837	1					1	12		6		1		
St. Johns	22,300	1						18		3				
St. Lucie	13,400							55		4				
Santa Rosa	17,400				1		1	1						
Sarasota	20,600		1				1	17		3				4
Seminole	25,600							40		2		1		
Sumter	10,417	1		4				4		2				
Suwannee	17,800							21						
Taylor	10,738		1					2		10				
Union	6,051							15		1				
Volusia	61,600						1	37		9				4
Wakulla	5,059							5						
Walton	13,871							1		3				
Washington	11,889							7		1				
TOTAL		92	32	7	10	6	64	2098	2	358	5	19	3	177

STATE OF FLORIDA

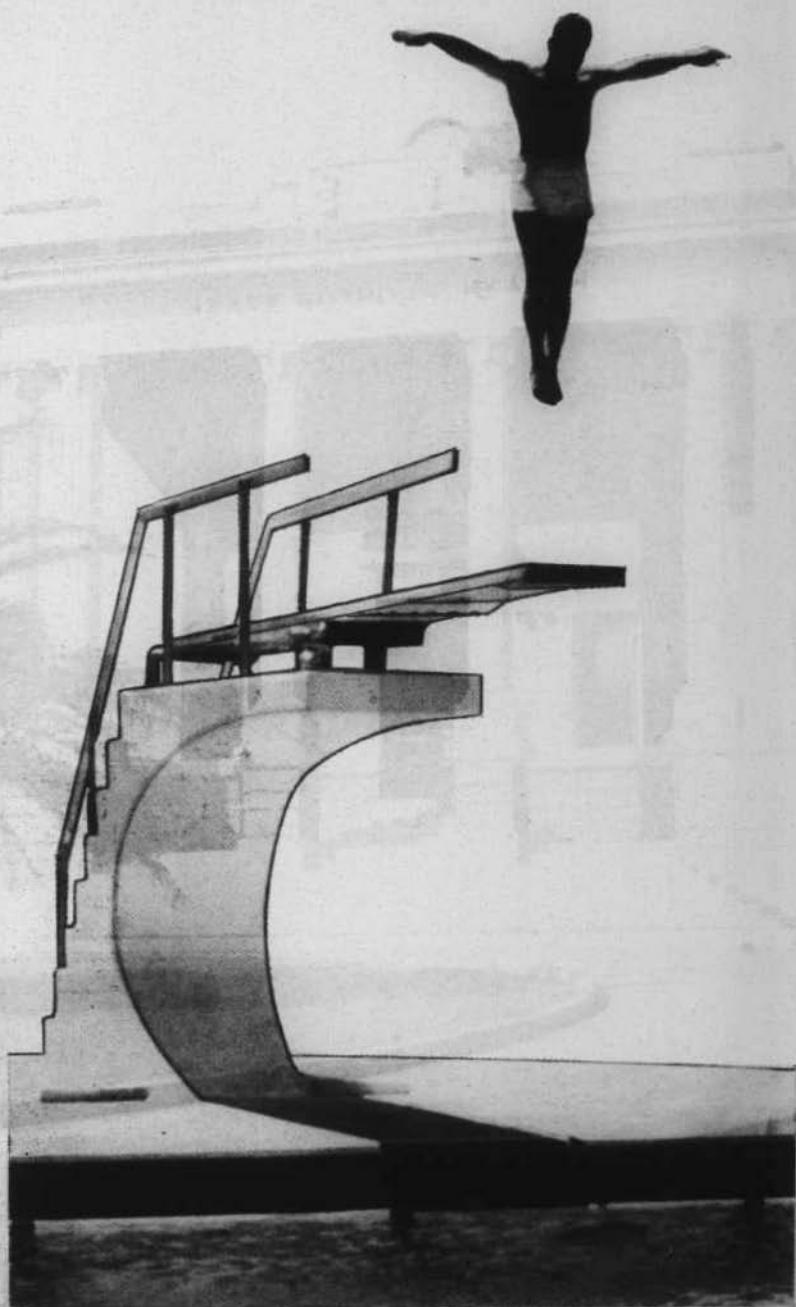




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Florida **HEALTH NOTES**

PUBLISHED BY THE FLORIDA STATE BOARD OF HEALTH
JACKSONVILLE · JUNE, 1947 · VOL. 39 · No. 6

SWIMMING POOLS IN FLORIDA

The State Board of Health

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Governor of Florida

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Please address all Health Notes correspondence to Ruth Stuart Allen, Editor.

Swimming Pools, a Public Health Problem and a Recreational Necessity

It will be noted from the map published in this issue of *Health Notes* that Florida unfortunately has very few *permitted* swimming pools. This is a bad commentary on the State of Florida because we are the recreational State of the Nation. The successful modern swimming pool involves a multitude of problems not always appreciated by the general public. Such a pool includes not only engineering and architectural problems, but also health, recreational and social problems. A swimming pool, to be successful from a public health, financial and recreational standpoint, requires careful planning in regard to its location, size, layout, construction, equipment and, last but not least, proper operation.

Obtaining a safe, clean swimming water is based on two simple principles: (1) remove or destroy as rapidly as possible dirt and infective materials which enter the pool, and (2) keep dirt and infective material out of the pool. A good index to pool operation is the degree to which dirt and pollution are excluded or removed from the pool waters.

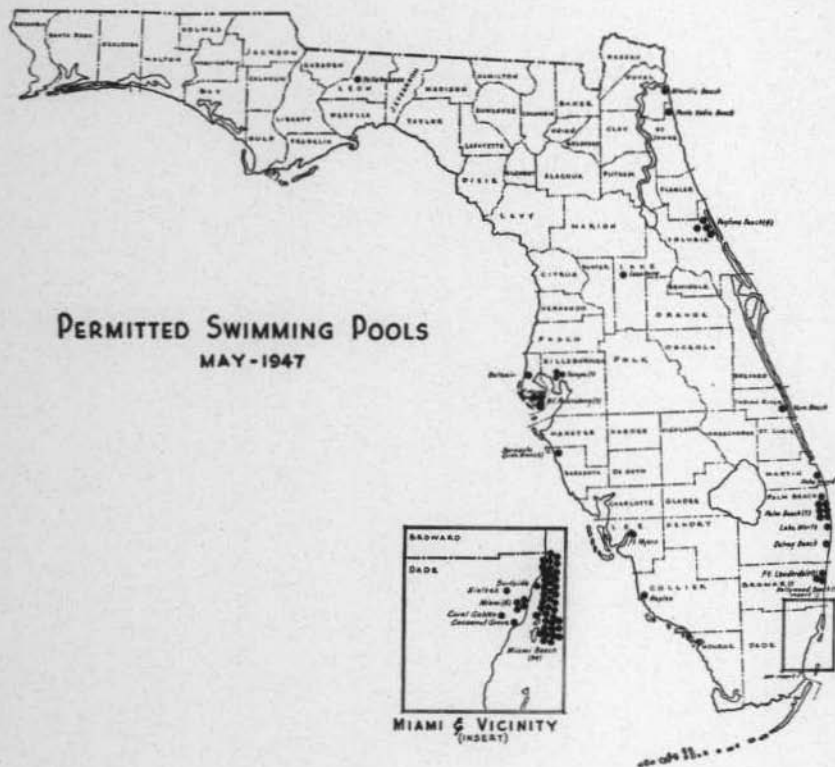
There are many other aspects to pool operation besides pool water. The operation program should be all-inclusive. *The chain is no stronger than its weakest link.*

Authority for the sanitary control of public swimming pools in Florida is vested in the Florida State Board of Health. Pools have been investigated and improved in a program carried on by sanitary engineers of the State Board of Health since *only* 1941. It has been the policy of the Florida State Board of Health to revise its swimming pool requirements from time to time in order that the latest developments in swimming pool construction, design and operation may be of the highest standard for the protection of the people of the State of Florida. In 1941, to provide the greatest protection possible, regulations were passed that all swimming pools must be designed by a qualified registered engineer in the State of Florida, and beginning this year at the Fifteenth Annual Short Course and Conference to be held at the University of Florida in June, swimming pool operators will receive the latest training in the operation of swimming pools.

DAVID B. LEE
Chief Sanitary Engineer
Florida State Board of Health

Florida HEALTH NOTES

ESTABLISHED 1890



Seen doing his fancy stuff on the top of Sheraton Plaza's swimming pool spring board is Paul B. Snyder, former national diving champion and manager of the pool.

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Swimming Pools in Florida

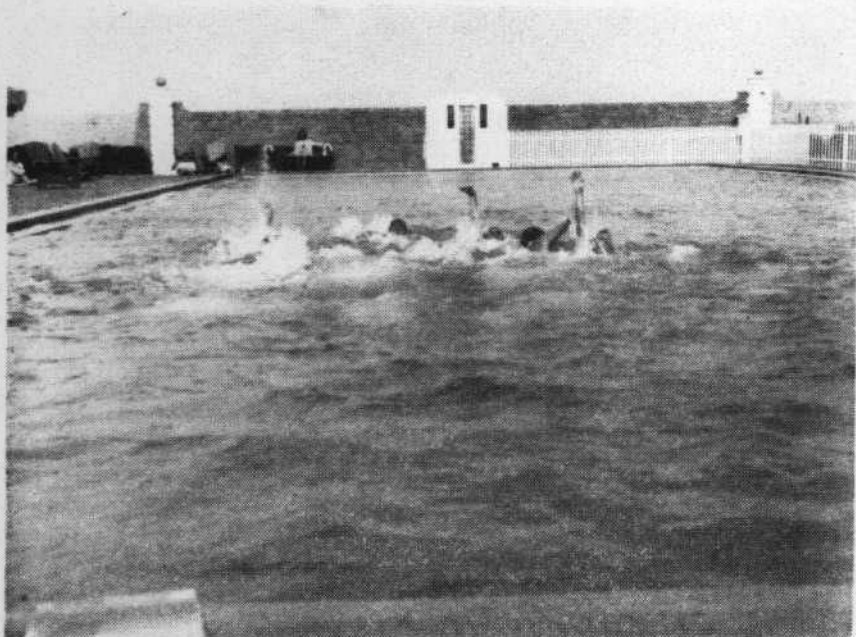
By WILLIAM D. BRYAN, JR.,
Sanitary Engineer
Bureau of Sanitary Engineering

This issue of Health Notes is devoted to a discussion of swimming pools, and rightfully so, because the climate in Florida lends itself to making swimming a healthful and popular pastime practically the year round.

As a parent, have you ever made the statement to a neighbor: "Let's send the children down to the pool today. I hear the pool water has just been changed and it should be clean this morning." Yes, this statement is frequently used but it carries a feeling of doubt. The idea was instilled into people through the use of the old style swimming pool, the "fill-and-draw" type. The Japanese and other oriental peoples patronize communal baths, meaning that all of the people of the neighborhood go down to the community bath and, together take their Saturday bath in one big tub. Naturally, the State Board of Health does not endorse this custom, nor permit the fill-and-draw type of swimming pool. Maybe you do not believe that any type of swimming pool, regardless of how it is operated, can be anything but a large community bath tub; or maybe you think that just because a pool is in operation that it's *necessarily* sanitary, or perhaps you haven't thought about it seriously at all. In any case, the purpose of this discussion is to give you, the patron of your local swimming pool, the ideas of the Bureau of Sanitary Engineering for enforcing the rules and regulations for the betterment and protection of the public health of Florida.

For a swimming pool to retain its permit to operate (please note map on opposite page showing pools which carry State Board of Health permits; also, a large number of applications are now under consideration), the provisions as set forth in Chapter XX of the Florida State Sanitary Code, entitled Swimming Pools and Bathing Places, must be complied with.

The requirements contain a stipulation that water samples for bacteriological analysis shall be taken from the corners and one from the center of the pool during use by patrons. This set of samples shall be collected at least once each month. Bottles



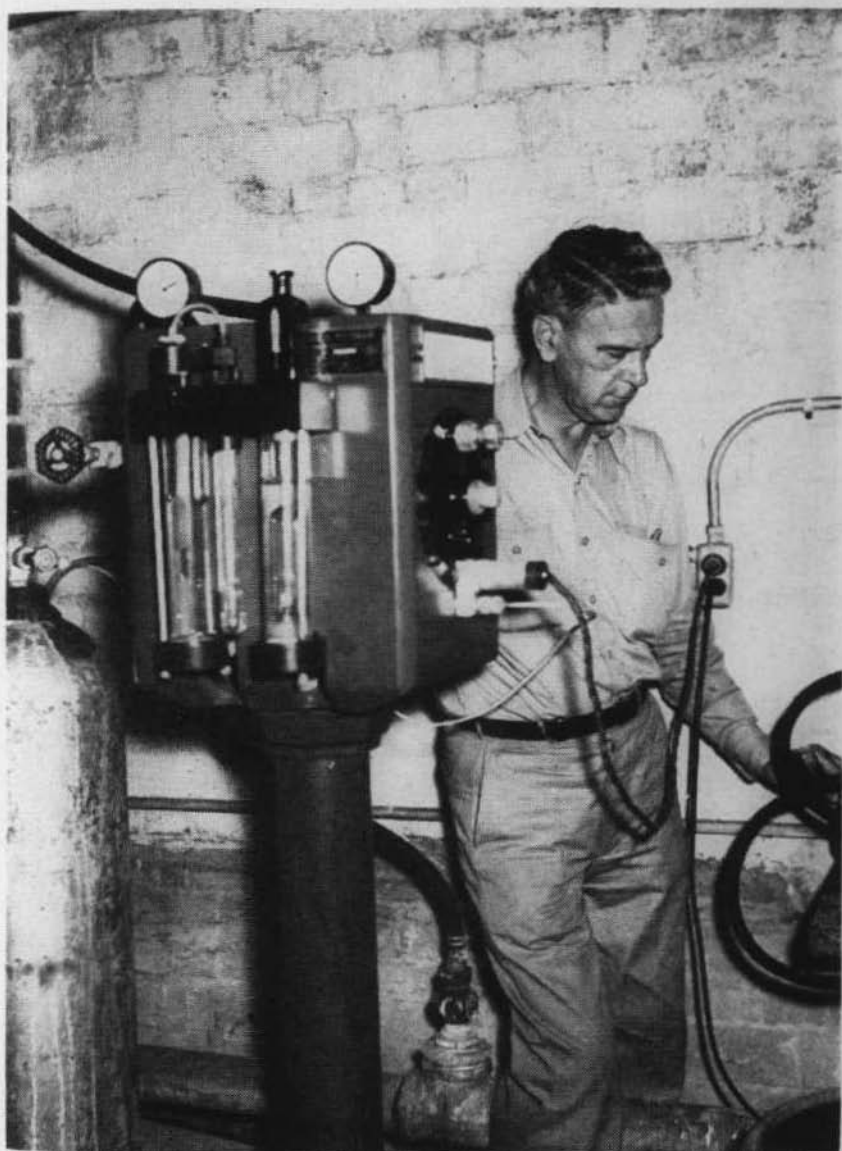
The pool at the Bath Club, Ponte Vedra, is second to none in Florida for its beauty, size and sanitation facilities. Here we show a group of Fletcher High School boys cavorting in its H₂O on which State Board of Health Engineers place their hard-
come-by okay. (Photo by RSA)

will be furnished by the county health unit, and central or branch laboratories of the State Board of Health.

Permits to operate a swimming pool are now issued on a permanent basis. That is, annual renewal is not necessary. During the war years, temporary permits were issued for some pools that did not have mechanical chlorinators and shortages prevented their installation, with the provision, of course, that operational practices would not be relaxed and that other minimum standards would always be met. As of July 1, 1946, all such permits expired.

Periodic inspection of pools are now made by a representative from the Central Bureau. If compliance with the requirements set forth by the Sanitary Code are met then the permit to operate will continue to be in effect. However, if failure to properly operate the swimming pool is ascertained, then the permit is revokable by an officer of the Florida State Board of Health.

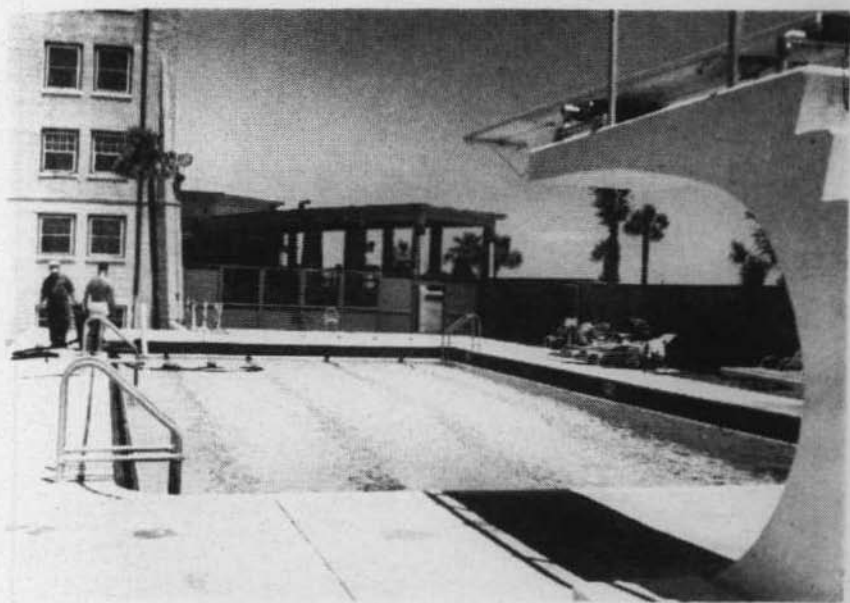
We believe that questions and answers will aid in getting you acquainted with what we think to be good swimming pool operational practice.



A behind-the-scenes at the Bath Club swimming pool shows assistant to the chief engineer checking the two chlorinators which measure content which is kept moving constantly during the six days a week pool is in use. (Photo by RSA)



The pictures in this issue showing machinery and the mechanics of keeping an accredited swimming pool in that condition may seem beside the point to the average man on the street. On the contrary, however, they are anything but. Their content may represent the difference between "approved" and "not approved" pools. Here is another picture showing the Bath Club engineer reading the water meter which indicates the flow of fresh water into the pool. A minimum of 500 gallons of "new" water per bather is the requirement, say State Board of Health Engineers. (Photo by RSA)



The pool at the Sheraton Plaza, Daytona Beach, is one of its big recreational drawing cards, and rightly so. It is high on the list of State Board of Health approved pools and is kept thusly by chief engineer Buehler and assistant John Miller. It is under the public supervision of Paul B. Snyder former national diving champion, whose picture is superimposed on the cover of this issue. (Photo by RSA)

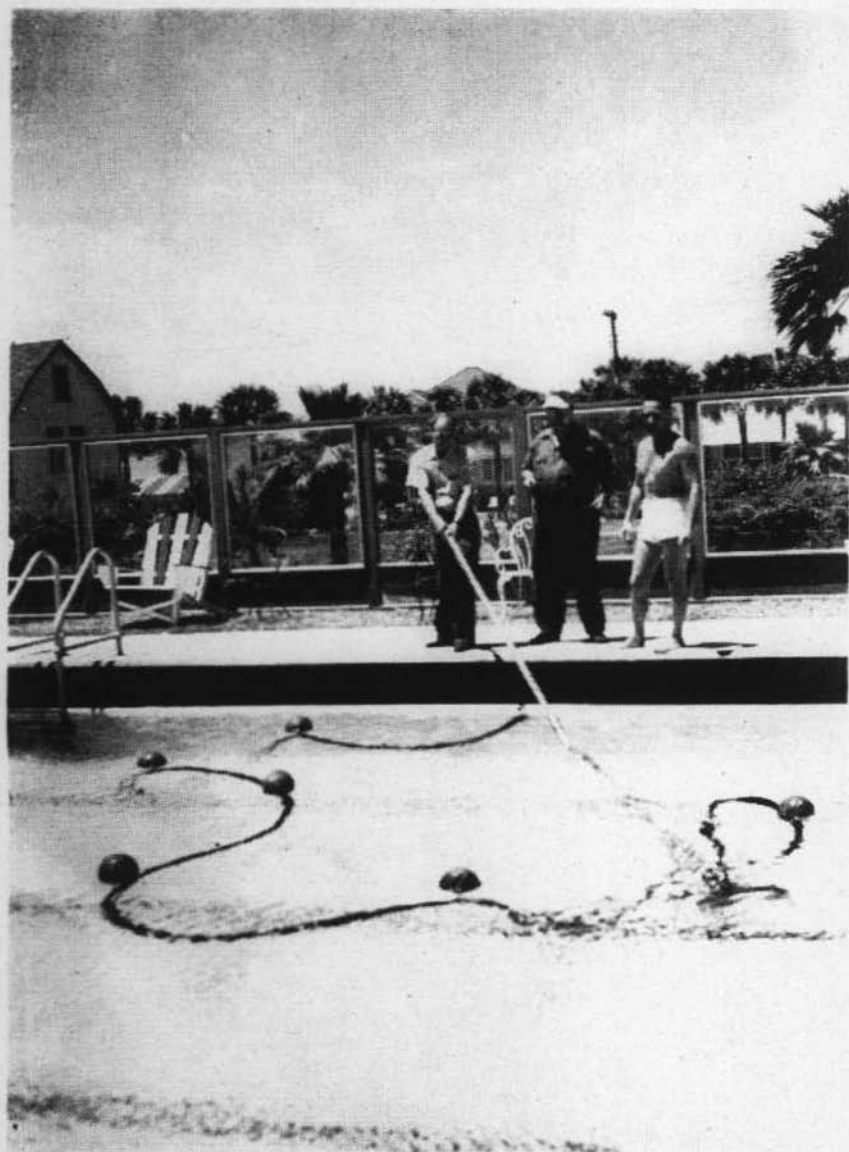
- Q. What are the standard requirements that must be met for the water in a swimming pool to be classified as "approved?"
- A. There are many requirements which must be met for water to pass Public Health Service Standards. The condition considered, however, at this time is the bacteriological quality. The bacteriological standards are based on the *coliform organism* density of the water.
- Q. What do you mean by *coliform density*? Remember, you are talking to a patron of a swimming pool, not a bug-ologist.
- A. That is a good question and it gives us a chance to explain drinking water standards and swimming pool water standards at the same time. A *coliform* organism is invisible to the eye. It comes from human body excreta. The "coliform density" means the number of organism that are present in a given amount of water. The standard number allows only one to be present in every 3½ ounces of water.
- Q. Well, that means that even drinking water is not perfect, is that true.



Another of those machinery pictures, but this is important because it shows the only filter of its kind in use in the State. Incidentally, it is under the close scrutiny of State Board of Health engineers. It is known as a stellar filter. A second such model has been okayed for the new pool at the University of Florida.

(Photo by RSA)

- A. Yes. That is correct. We all strive for perfection but must realize that it is not always obtained. The Public Health Service drinking water standards state, "of all the standard ten milliliter (10ml.) portions examined per month in accordance with the specified procedure, not more than 10 per cent shall show the presence of organisms of the coliform group."
- Q. If the water in our swimming pool has a few bacteria present, what can be done to eliminate them?
- A. The most acceptable method of sterilization is with the use of chlorine.
- Q. I don't like the odor of chlorine. Is there some other method as economical that can be used?
- A. When chlorine is used in the correct amounts, its presence is not objectionable and the results obtained by its use are very desirable. To date chlorination is the most accepted method for sterilization of water.
- Q. Will small amounts of chlorine sterilize water?
- A. When chlorine is added to water three different terms are used: (1) Amount added. (2) Amount needed to satisfy the needs of the water; and, (3) The amount remaining in the water after a given contact period. *The amount that remains is termed "residual." The residual is the requirement which must be met. If after 20 minutes contact time, under normal conditions, there is at least 0.3 parts of true chlorine in every one million parts of water, then we say that adequate residual chlorine is present in the water.*
- Q. I notice you are basing your standards on coliform bacteria which you say are from waste of the human body. What is the possibility of the poliomyelitis germ being present in swimming pool waters?
- A. You have asked a very important question. Also, one which cannot be answered directly yes or no. It is a subject, however, which we do want to discuss with you and we believe we have some rational reasoning to accompany our beliefs. From reliable research it has been reported that the intestinal discharges of poliomyelitis cases, and carriers, contain the virus of the disease. The presence of the virus has also been found in sewage. These facts indicate one possibility of the transmission of poliomyelitis as a result of human contamination of drinking



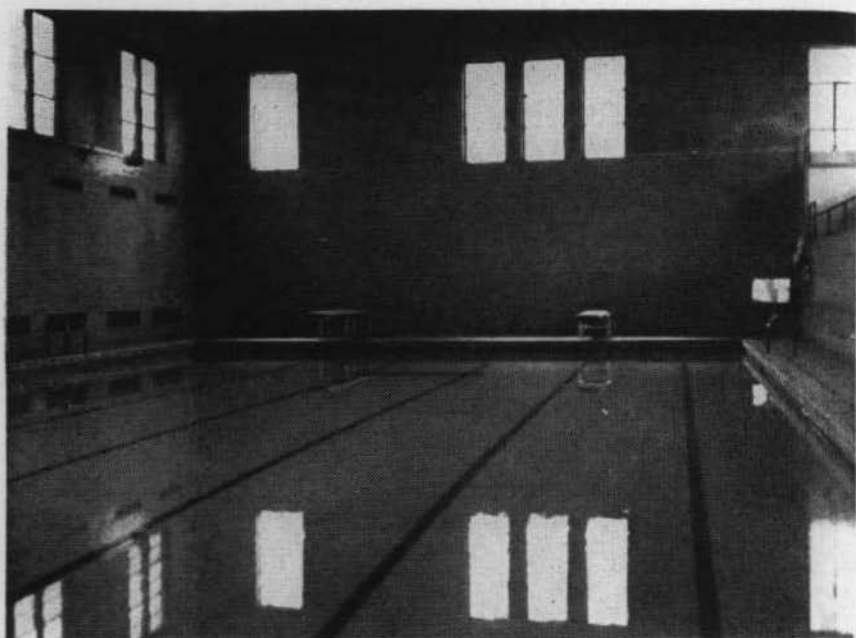
Interesting feature of Sheraton Plaza swimming pool is that it is never emptied. The water moves constantly from the pool to the purifier and then back to the pool. Sand and "catchings" in the water are extracted routinely by a special vacuum cleaner shown in use above. It really doesn't look like an octopus, but the hose is so heavy, that special floaters are used to keep it at water level.

(Photo by RSA)

or bathing waters. It has been found also that if a free chlorine residual is present in the water that the poliomyelitis virus is inactivated. (Research reports state that a "free" chlorine residual of 0.3 p.p.m. (parts per million) will inactivate one to 500 dilution of the poliomyelitis virus after a contact period of 10 minutes.)

There is, however, another possible danger from polio connected with a swimming pool. IF your child already has the disease present in his system and then exerts himself too much while in swimming, or becomes too COLD from exposure, then the disease may be brought on by the USE of the swimming pool and NOT from actual pollution of the water.

- Q. I never let my child stay in swimming more than an hour. Is that wise?
- A. Yes. Swimming is strenuous exercise, and playing in shallow water is also strenuous exercise. One hour or less is sufficient time to stay in the swimming pool.
- Q. When I go into our pool, why does the chlorine in the water burn my eyes?
- A. When eye irritation is caused by swimming pool water, it is generally due to acidity of the water (caused by clearing properties added to water), not the chlorine residual.
- Q. Then chlorine in water will not burn the eyes. Is that true?
- A. Water which is over-chlorinated may smart the eyes; but a well balanced water with the required minimum chlorine content will not bother your eyes any more than swimming in distilled water will hurt you. When any water is thrown into your face a certain amount of eye irritation is caused. Remember, always, that man is not made to live like a fish. When his eyes are covered with water, the eyelids begin to blink endeavoring to knock the water away from the eyeball. This agitation will interfere with the vision and cause the eyes to become red and irritated.
- Q. I caught a bad case of athlete's foot from our pool last summer. Yet the place in general and locker rooms in particular looked clean.
- A. It is believed by many who have studied the disease that athlete foot germs are *not necessarily picked up from around the swimming pool*. It is believed, too, that a large percentage of the people have the germ harboring under the dead



Here is a shot of one of the finest indoor pools in Florida, at the Florida State University, Tallahassee. Really, the pool was full of water when this picture was made, without artificial light. Unfortunately, the clear white tile and the undisturbed water give a different impression. Photographer donned special "sneakers" before allowed inside the pool room to make the picture. Lines are on the bottom of pool, naturally. (Photo by RSA)

skin which is ever present between the toes or under the foot. When one walks around on the wet locker room floors, puts on his socks and shoes without thoroughly drying between the toes, the germ is encouraged to multiply and spread. *An old case has again become active.* Shoes have been known to harbor these germs for 4 or 5 years. When such infection is possible, then the only protection for one who has the athlete foot germ is for him to practice good foot sanitation at all times. Always dry between the toes thoroughly and then dust with a recognized foot powder.

- Q. Is the foot bath with chlorine solution adequate for control of athlete's foot.
- A. If used correctly the foot bath which contains chlorine solution does *some* good. However, for chlorine solution to give maximum benefit in the control of athlete's foot, *one must keep his feet in the recommended strength solution for at least 15 minutes.* You can't fool germs, and when you take short cuts, who is to blame? Many pool managers use the

foot bath as a substitute for elbow grease. Hard work is required to clean up the locker room floor. The presence of the odor of chlorine in the locker room does not mean that the floors and duck boards are clean.

- Q. What about the possibility of the transmission of other diseases?
- A. It is possible for typhoid fever and dysentery to be transmitted by contaminated swimming pool water. This possibility can be eliminated when the pool is properly operated. Infection of the eyes, ears, nose and throat may come either from the nasal passages of the individual or from grossly polluted water. The organisms which cause the trouble are usually those which are already present in the nose or throat of the swimmer and are carried into the sinuses and middle ear by water. Skin infections are often spread by the common use of towels, brushes and combs. This is, also, true in the case of the common cold. The membranes of the nose and throat may be so irritated in some individuals by improper swimming that colds may develop as a result.
- Q. If our pool manager practices good housekeeping will my confidence in the pool, as a safe place to swim, be justified?
- A. Yes. The operation of a swimming pool does require more than the services of just a glamor boy. Modern pools have recirculation equipment which actually takes water from the pool and reprocesses it continually. When this is properly done the chance or probability of getting infection or disease from the water is less and less. The chlorine residual is supplied to add margin of safety. There are two ways to operate a swimming pool: (1) When the operator stays ahead of the water (swimming load anticipated). (2) When the water is *ahead* of the operator and the swimmer is the victim.
- Q. Our swimming pool uses ocean water for its supply. Is it necessary to chlorinate this water?
- A. Yes. Sea water must be disinfected in the same method used for fresh water. The small amount of dissolved salts found in sea water has little if any disinfecting value. Sea water bathing has this feature. It stimulates the bather. This is true due to the difference in buoyancy effect and makes swimming easier. Some believe that this difference in pressure on the body while swimming causes the discharge from the nose and mouth to increase and therefore the need for disinfection is increased.



Chief engineer in charge of the pool at Florida State University (former Florida State College for Women) tests the chlorine residual (how much) in the water as it leaves the pool. Testing is routine a number of times daily when pool is in use. Pool is considered "tops" for the "indoor" type, in the State. (Photo by RSA)

Q. Why are scum gutters required?

A. Scum gutters carry off the floating material which may accumulate on the surface of the water. The gutters give the bather a place to expectorate when he feels a need to clear his mouth.

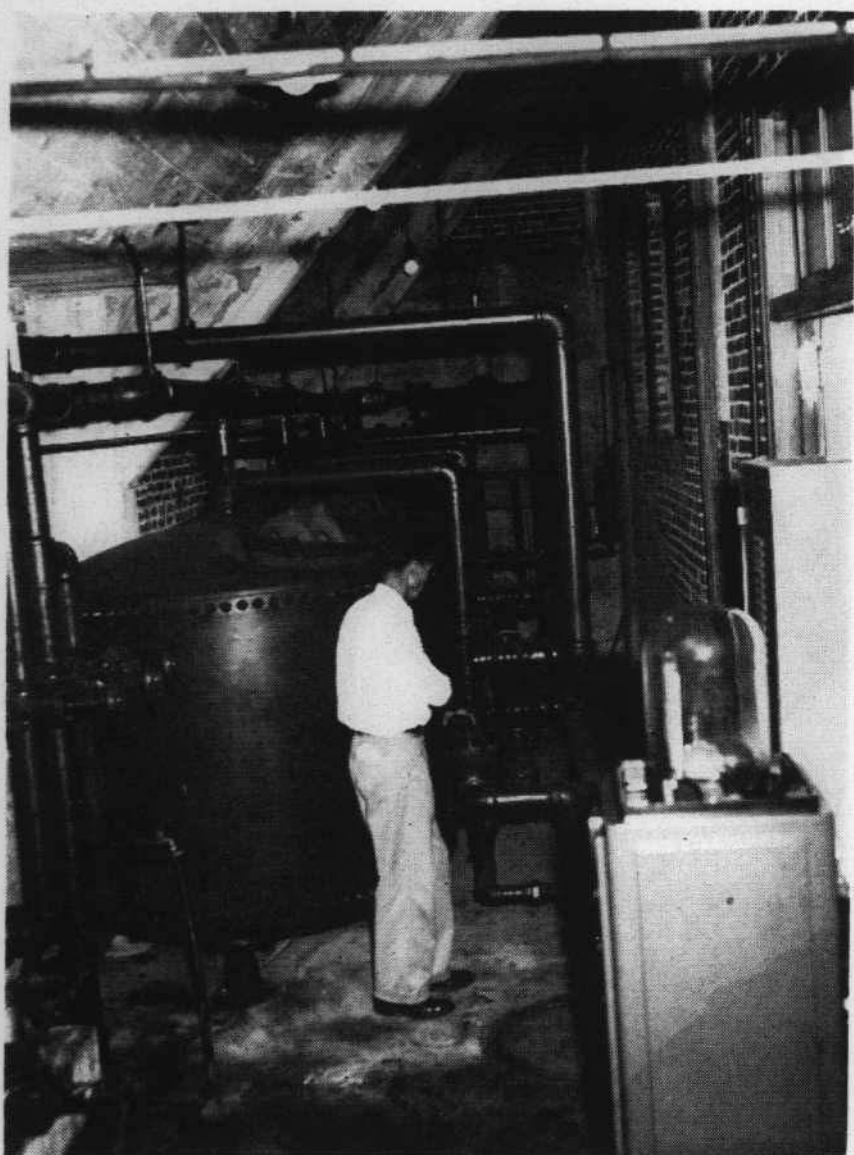
Q. Is it true that scum gutters are breeding places for germs?

A. Yes. If improperly designed they are of no practical value. Our specifications which must be met on the construction of all new pools are such that the splash-over water will be carried to the sewer immediately. A poorly constructed scum gutter will not do the job but is merely a trough for catching just what it says and that is "the scum." Once water reaches the scum gutter, it should not get back into the pool or else it is acting to reinfect the pool water.

Q. Who checks on the operator to see if he is operating the pool equipment correctly?

A. *A representative of the Bureau of Sanitary Engineering, State Board of Health, makes an inspection as often as he can make the rounds. A representative of the local health unit collects periodic samples of the water and sends them to the State Laboratory for bacteriological examination. If this is not possible, then the manager may collect and send in the samples. The operator is required to make frequent tests and keep daily records which he sends to the Bureau for review and check. The tests required are simple and are mainly for chlorine residual and pH or acid content of the water. If the results are properly reported, then the condition of the water may be fairly accurately determined. Of course, the actual appearance of the pool will be an indication of its condition. All pools should contain a bright sparkling clear water. The bottom and sides should be free from slime and algae (the green growth that forms on the bottom and sides so quickly in a poorly operated pool). This is our suggestion—if something is different from the way you think it should be around and in your local swimming pool, get after the manager and make him give you a reasonable answer. If he is on the job, his answer will satisfy and overcome your feeling of doubt. If he says that he knows it is wrong but there is nothing he can do about it, then there is a two-fold answer; either he hasn't tried or the equipment on hand is not good enough.*

Q. What are the requirements that must be met by a properly operated pool?

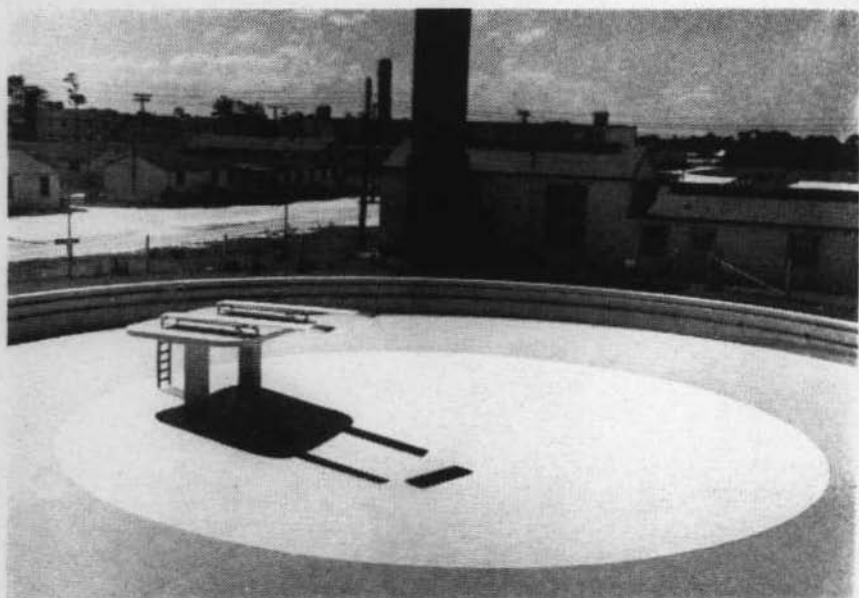


The impressive looking drums and pipes in this picture are responsible for the one time Women's College pool being termed high on the roster of the best in the State. In the foreground is the chlorinator, and then the big filters. Chief engine.e is regulating valves to change flow of water which will clean the filters.

(Photo by RSA)

- A. A properly operated swimming pool should meet the following requirements:
1. The water should meet the Public Health Service Drinking Water Standards bacteriologically at all times.
 2. The pool water should constantly contain enough available disinfectant to sterilize any bacterial contamination the instant the bather goes into the water. When chlorine as a disinfectant is used, a residual of 0.3 to 0.6 parts per million must be maintained.
 3. The water should show an alkaline reaction, or in other words, it must not be acid to pH test. If this is allowed, eye irritation can be expected.
 4. *The water should be clean and sparkling, clean enough to plainly see a black disc 6 inches in diameter placed on the bottom in the deepest portion, from a distance of 10 yards.*
 5. No noticeable color, taste or odor should be present at any time.
 6. The air temperature should be 5° F warmer than the water temperature to give a condition for a perfect swim.

After this discussion on swimming pools, we sincerely hope that your faith in a properly operated pool has been developed or substantiated. If you as a patron demand that the manager of four local swimming pool provide for you a clean and healthful place to swim, it is possible that you can enjoy the exercise and pleasure that go with a pool without always feeling that you are using the community bath tub. If a swimming pool is operated like a bath tub, then that is what it is. If a swimming pool is operated according to accepted methods of cleanliness and sanitation, then we can feel that we can take a safe enjoyable swim in clear and sparkling drinking water and have the peace of mind that we are adequately protected from the chance of contracting diseases transmitted by a contaminated water.



Here, it is safe to say, is the State's most unique swimming pool. It was built by the Army as a therapy pool and was important in the Welsh Hospital rehabilitation program. In background is heating plant, and because the water can be heated to 90 degrees it is thought the pool's potential values may eventually be utilized similarly to those of the natural Warm Springs. Pool, which is 300 feet around, has five inch deep scum gutters, was recently opened to the public by city of Daytona Beach which took it over from the Government. Pool is painted a seablue with a white center; water gushes in from center vent, although it was empty when this picture was made from the roof of an adjoining building.

James B. Young is in charge of the pool. (Photo by RSA and JBY)



Here is a picture of the therapy pool's unusual gravity or sand filters at work. The water, before chlorination, is filtered through these special-sand filled boxes . . . Here, too, the water is circulated; the pool is never actually emptied. . . . Engineers point out loss of income when pool is out of operation for a day, also, the added expense of personnel for pool scrubbing. (Photo by RSA)

For the Swimmer's Information:

The Following Technical Memorandum on Swimming Pools was Recently Mailed to Swimming Pool Superintendents Throughout the State

“Reference is made to Chapter 514 of the *Florida Statutes* of 1941. These statutes make it ‘illegal to operate a public swimming pool, bath house, public swimming or bathing place, or related appurtenances unless permitted by the Florida State Board of Health and authorize the Florida State Board of Health to make and enforce such rules and regulations it deems necessary in supervising the sanitation, healthfulness and cleanliness of such places.’

“Before a public swimming pool, a bath house, or a public bathing or swimming place is placed in operation, the owner or operator must obtain a written permit from the Florida State Board of Health. Applications for such permits shall be upon forms furnished by the Florida State Board of Health. Permits may be revoked for violation of or non-compliance with State Sanitary Code Regulations.

“Permits to operate a swimming pool are now issued on a permanent basis. That is, annual renewal is not necessary. During the war years, temporary permits were issued for some pools that did not have mechanical chlorinators and shortages prevented their installation, with the provision that operation practice would not be relaxed and that maximum standards would always be met. As of July 1, 1946, all of these temporary permits expired.

“For a swimming pool to retain its permit to operate, the provisions as set forth in Chapter XX of the Florida State Sanitary Code, entitled “Swimming Pools and Bathing Places,” must be complied with.

“Incorporated in these requirements is a section which relates to the Sanitary Quality of the water in swimming pools. Water samples for bacteriological analysis shall be taken from the corners and one from the center of the pool, during use by patrons. This set of samples shall be collected at least once each month. Sample bottles to be used will be furnished by the County Health Unit, Central or Branch Laboratory of the Florida State Board of Health. The bottle wrapper should have a red X, which means that the bottle has been prepared to transport chlorinated water. Do not pour out the solution in

the bottle when making a sample collection. The following standards shall be maintained:

- "1. *Bacterial Quality*: Supply water and pool shall meet the U. S. Public Health Service standards for drinking water.
- "2. *Chemical Quality*: The pool water where alum (aluminum sulphate) is used as a coagulant shall be maintained at all times in such alkaline condition that the pH of the water shall equal or exceed 7.0. When the pool water is treated with chlorine in the presence of ammonia, its pH shall equal or exceed 7.6.
- "3. All chemical and bacterial examinations provided for in this regulation shall be made in accordance with the Standard Methods of Water Analysis as adopted by the American Health Association.

"Chlorine disinfection shall be required on all pools. Such chlorination shall be applied so that at no time will the residual chlorine in any part of the pool, when determined by the orthotolidine test, show less than 0.3 parts per million (p.p.m.) or more than 0.6 parts per million when chlorine alone is used. When ammonia is used with chlorine, the chlorine residual shall be maintained at not less than 0.5 parts per million nor more than 1.0 part per million, the reading being taken approximately 5 minutes after addition of the orthotolidine to the sample. Chlorination equipment of acceptable capacity and design must be provided.

"The maximum bathing load and pool capacity are now designated on the permanent permits. If these governing factors are not shown, then Chapter XX should be referred to and calculations made accordingly.

"Every pool shall be under the direction of a *qualified competent operator*. Sufficient attendants shall be provided to operate the pool in an orderly and sanitary manner. Adequate life guards shall be provided and shall assist in sanitary control.

"The Bureau of Sanitary Engineering will issue a supply of Monthly Swimming Pool Report forms upon request from the owner or operator of each swimming pool. Daily records of operational data and chemical analyses results must be kept and the completed reports forwarded to the Bureau for review.*

"Periodic inspections will be made by a representative from the Bureau. If compliance with the requirements as set forth by the Sanitary Code are met then the permit to operate will continue to be in effect. However, if failure to properly operate the swimming pool is ascertained, then the permit is revokable by any officer of the Florida State Board of Health."

As a Matter of Record

The Following Extracts are Reprinted from the Chapter of the Florida State Sanitary Code which Governs the Requirements for Operation of a Public Swimming Pool

"Personnel and Supervision. Every pool and bathing beach shall be under the direction of a qualified, competent operator. Sufficient attendants shall be provided to operate the pool or bathing beach in an orderly and sanitary manner. Adequate life guards shall be provided and shall assist in sanitary control. No person shall be employed who has, or is a carrier of a communicable disease. Supervision shall be provided on all wading pools while they are in use.

"Drinking Water. Drinking water shall be supplied at all pools and bathing beaches in conformity with Chapter II and VII of this Code.

"Food, Drink, Tobacco. No food, drink, gum, or tobacco shall be used or consumed within the pool enclosure.

"Separate Spectator Provision. Provision made for spectators shall be outside the pool areas, so that spectators cannot have access to pool, walkways, dressing rooms, bather's toilets, etc.

"Dressing Rooms. Dressing rooms shall be sanitary, ample, and in proportion to the maximum bathing load of the pool, with entirely separate provision for men and women. At pools and bathing beaches the bathers admitted shall not be in excess of the dressing room accommodations. Dressing compartment walls shall terminate not less than four (4) inches above the floor to facilitate flushing.

"Toilets. Adequate and properly located toilet facilities shall be provided at all pools and bathing places and in compliance with Chapter VII of this Code.

"Shower Rooms and Facilities. Adequate shower facilities shall be provided with water from a safe and approved source, with necessary soap and in such location as to be readily available to persons entering the pool area. Common towels, combs, etc., shall not be provided for use by patrons.

"Shower room floors shall be of impervious material, suitably sloped to keep them drained, and shall be so constructed as to be easily cleaned. Duck boards or wooden grating may be used on shower floors only if provided in duplicate sets so that clean and dry duck boards are furnished as needed. The

use of duck boards does not eliminate the necessity of keeping the floors clean and sanitary.

"Light and Ventilation. All indoor pools, dressing areas, equipment rooms, etc., shall be adequately ventilated and lighted.

"Foot Baths. Foot baths, if used, shall be cleaned daily and shall contain a chlorine solution of 0.3 per cent to 0.6 per cent chlorine or other approved solution of equal bactericidal quality.

"Outdoor Pool Location. Outdoor pools should not be located where they will be exposed to excessive pollution by dust, smoke, soot, or other undesirable substances.

"Cross-Connections. No cross-connection shall exist which under any condition may cause contamination of a water supply used for domestic purposes.

"Operation Reports. Such operation reports as may be required by the Florida State Board of Health shall be accurately made and sent to the Bureau of Sanitary Engineering.

"Algae Accumulations. Walls and floors of pools and surrounding walks and scum gutters shall be kept free of algae and other accumulations.

"Preparation of Bathers. Satisfactory and acceptable methods of properly preparing bathers before allowing them to enter the pool shall be provided. Bathers shall be required to bathe with soap in the nude before entering the pool. No person shall be allowed in the pool or pool area with oil or grease or other such preparation applied upon the skin.

"Diseased Persons. No person with evidence of having any disease shall be allowed in a pool or pool area, bathing place or bath house.

"Bathing Suits. Proper suits, caps, and towels shall be available. Where suits and towels are provided by the pool management, they shall be properly laundered before re-use and proper and acceptable equipment shall be provided for servicing them. Where privately owned suits are used, it shall be the duty of the pool management to see that they are clean and dry before use.

"Regulations to be Posted. Suitable placards embodying pool regulations and instructions shall be conspicuously posted in the pool area, and in dressing rooms.

"Animals Excluded. No dogs or other animals shall be allowed in the pool area, dressing rooms, or other parts of the pool enclosure.

"Minimum Standards for swimming pool design and operation shall be those set forth by the current report of the Joint Committee on Swimming Pools and Bathing Places of the American Public Health Association Conference and State Sanitary Engineers except where same conflicts with provisions of the Code."

**NUMBER OF CASES OF SPECIFIED DISEASES BY COUNTIES, FOR
THE MONTH OF APRIL
(March 29th-April 26th)**

	Estimated Population	Cancer	Diphtheria	Dysentery-Ameb.	Dysentery-Bac.	Meningitis-Ep.	Polomyelitis	Scarlet Fever	Syphilis	Tetanus	Tuberculosis Pul.	Typhoid Fever	Typhus Fever	Undulant Fever	Whooping Cough
Alachua	38,245							1	20	1	23	1	1		1
Baker	6,326								3		1				
Bay	53,200	1	1						16		4				2
Bradford	11,600								2		1				
Brevard	20,750					1		1	12						
Broward	55,100	1							41		10				8
Calhoun	8,230														
Charlotte	4,470											1			
Citrus	5,427								1		1				
Clay	11,600								8						2
Collier	4,957								1						
Columbia	17,250								4		2				
Dade	336,300	57	2				1	7	155	1	26	2		1	91
DeSoto	6,854								6						
Dixie	4,926										5				
Duval	302,200		1					4	171		22		2	1	18
Escambia	118,900						1		42		14	1	2		4
Flagler	2,652								1						
Franklin	8,500								3		1				
Gadsden	31,041								14		1				
Gilchrist	3,466								1						
Glades	2,281								3						
Gulf	7,040														
Hamilton	8,731										1				
Hardee	8,885					1			1						
Hendry	5,066								8						
Hernando	5,700								2						
Highlands	19,300								6						
Hillsborough	220,100	22	3			1		7	102		37	1	4		11
Holmes	14,627								2						13
Indian River	9,130						2		3						1
Jackson	34,550								3		2				
Jefferson	11,066								2						
Lafayette	3,995								2						
Lake	28,300								19						
Lee	26,300								31		1				
Leon	37,100	1		5					47		6				2
Levy	9,902						1		3		2				
Liberty	3,193														
Madison	15,537								3					1	
Manatee	27,100								8		1				
Marion	36,900								25		1				
Martin	6,094								2						
Monroe	21,200		4						3		4				6
Nassau	10,900								3						
Okaloosa	17,650								1		1				
Okeechobee	2,919			1					7						2
Orange	94,200					1		2	55		10				42
Osceola	10,800	1			1						2				
Palm Beach	126,700	1				1	4	5	64		3				
Pasco	13,729		1						4						
Pinellas	147,300							5	29		12		1		1
Polk	123,800	1							53		34		1		7
Putnam	17,837					1			20						
St. Johns	22,300								8		5				
St. Lucie	13,400								8		2				
Santa Rosa	17,400							1			1				
Sarasota	20,600								8		1				
Seminole	25,600								23		1		1		2
Sumter	10,417								6						1
Suwannee	17,800								20		13				
Taylor	10,738								1		1				
Union	6,051								20						
Volusia	61,600							2	37		16				1
Wakulla	5,059								1				1		12
Walton	13,871														
Washington	11,889								3						
TOTAL		85	12	6	1	6	9	35	1147	2	269	6	13	4	227



HN 5-46

■ Accredited County Health Departments
 □ Without Accredited Health Departments



Florida **HEALTH NOTES**

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NUTRITION SURVEY ISSUE

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Florida **HEALTH NOTES**

ESTABLISHED 1890

Malnutrition, A Major Public Health Problem

By THOMAS PARRAN
*Surgeon General, U. S.
Public Health Service*

Public health officials now face the fact that malnutrition is a major public health problem. We know that it is widespread and serious. Every study, by whatever means conducted, shows this to be the case. Like an iceberg, most malnutrition, (and the most dangerous part), is hidden. The very fact that it is hidden makes it even more dangerous. Our morbidity and mortality tables do not reflect the drain on our national health economy caused by malnutrition.

Agriculture is making every effort to produce an adequate supply of the foods which provide essential nutrients. Organized education is stimulating in the child a desire to eat the foods he needs for growth and health. Organized public health must seek to discover where malnutrition exists, must learn how much malnutrition there is, and must determine what types of malnutrition are affecting our people.

Avoiding malnutrition is not enough. In our efforts to attain better health, *we must not only seek to prevent disease—we must also make every effort to improve what is now accepted as average health.* Good nutrition is based upon the development of good food habits which are practiced day after day and year after year. *Because nutrition is intimately related to numerous other factors affecting the health of the child it cannot be dealt with in an isolated way.*

We have mobilized our forces to take the offensive. Now agriculture, education, public health, and the family physician must fight side by side on a common front.



A number of new health protection programs have been launched by the State Board of Health during the past year in an effort to better survey and eventually control Florida's public health problems. When State Health Officer Dr. Wilson T. Sowder urged that every person be vaccinated the central office personnel was first on the roster. Same was true in the case of typhoid inoculations and a limited study of diabetes. Also, when Dr. Wilkins initiated his study to ascertain the whys and wherefores of the high rate of malnutrition among Florida school children. In foreground is Dr. Wilkins helping himself to a drop of Chief Sanitary Engineer Dave Lee's high-testing blood. In background is State Board of Health personnel.

Nutrition Program Expanded

By WILSON T. SOWDER, M.D.
State Health Officer

The State Board of Health has always been concerned with the problems of nutrition in Florida. It is doubtful however, if proper nutrition, as a factor in maintaining health, has been given the consideration it deserves until in recent years.

One of the primary public health nutrition problems in the South is anemia. There is evidence that anemia is present in many children who are *not* suffering from hookworm disease. Negro children seem to be more subject to anemia than white children in spite of their greater resistance to hookworm infestation. There is some likelihood that mineral deficiencies in the diet, and perhaps in the soil on which the food is grown, may account in some degree for the presence of anemia. It is natural to suspect that iron is one of the deficient minerals, but copper, cobalt, and other minerals, as well as certain vitamins and protein may also play a role.

Two years ago the State Board of Health, in cooperation with the State Nutrition Committee, sponsored nine nutrition clinic demonstrations in several parts of the State including Tallahassee, Jacksonville, Leesburg, and Miami. The examinations were made by Dr. Walter Wilkins, Public Health Nutrition Officer of the War Food Administration. The findings, reported in the May 1945 issue of Florida Health Notes, prompted an editorial in the Journal of the American Medical Association.¹ These demonstrations brought to light certain nutrition problems such as: follicular conjunctivitis (granulations of the eyelids), hyperkeratosis (goose-pimple skin), angular stomatitis (cracks at the corners of the mouth), cheilosis (peeling lips), blepharitis (crusty inflamed eyelids), spongy gums, and various signs suggesting rickets. The laboratory tests revealed hookworm and anemia. It was emphasized that these and other problems concerning the relationship between health and nutrition require careful study on a large scale.

To direct the work of an enlarged program, the services of Dr. Walter Wilkins were secured last year. Dr. Wilkins, who received the Ph.D. degree in biochemistry and nutrition from Vanderbilt University and later was graduated from the medical school of that institution, served for some time as director of



The State Board of Health has been host to a long procession of noted nutritionists this year. Here we see Dr. Wilkins (center) and three of his august visitors doing some routine inspections in a Lake County school. Left are Dr. and Mrs. Norman C. Jolliffe of New York City. And to right, Dr. Frederick F. Tisdale, department of pediatrics, University of Toronto. Dr. Jolliffe is conducting a similar study with the New York City Health Department. He is a member of the New York Academy of Medicine and of the Food and Nutrition Board, National Research Council. Both physicians are internationally known for their work in the children's phase of nutrition.

the Division of School Health and Nutrition of the North Carolina State Board of Health. From 1942 until December, 1945, while commissioned by the United States Public Health Service, he did extensive work in nutrition for the War Food Administration in most of the 48 states.

We are looking forward to a cooperative program for nutrition investigation in Florida, in which the State health department will carry its fair share of the load. This program definitely puts Florida out in front among the states in attempting to throw more light on its public health nutrition problems. It is anticipated that this new public health activity will not be limited to investigation, but will include services along the lines of education, demonstration, and consultation.

State Board of Health Begins Food Research Program

What Will It Mean to the Health of Florida's Children?

This is pioneer work. No state ever has set up a similar unit, and surprisingly little is known about food and its relation to health.

Every Florida cattleman knows what has been accomplished in the last decade through research in feeds and feeding. The mineral box has been set up in every pasture. A decade ago Florida groves were for the most part sickly and yellow, and the best of plant foods failed to make them fresh and green, as they are today, until research men found which minerals were missing from the fertilizers. Florida is known the world over for what has been done in the feeding of plants and animals. Better cattle and citrus have added millions of dollars to the state's revenues, *but no one seemed to find time to do anything about human beings.*

No one got around to assessing the value of bright eyes, keen minds and strong bodies in Florida, or in the nation for that matter. Yet medical men have long been worried about the large number of sickly children, especially throughout the South, *from causes, that could not be determined.*

Hookworm, of course, was known to be a chief offender. But what about the anemic children who do not have hookworm?

The State Board of Health's research unit, now in full swing to ascertain the cause or causes of malnutrition, was actually planned by Governor Caldwell and Dr. Wilson T. Sowder, State Health Officer. A budget of \$17,500 was obtained from three New York foundations, the Milbank Memorial Fund, the Research Corporation, and the Nutrition Foundation. The Children's Bureau put up the money needed for the work in Hamilton County. The State Board of Health helped, and other funds were received from local private sources.

The work being done here already is causing some interest nationally. Several other states are planning to set up studies patterned on the Florida plan.



Never let it be said that this Tavares lad doesn't cooperate when the good Doc says "Stick out your tongue and say AH!" At left is the noted Dr. E. W. McHenry, professor of public health nutrition, School of Hygiene, University of Toronto, another visitor of Florida with an eye on the State Board of Health's pioneering study to find out what is causing so much malnutrition among school children in the Sunshine State.



Youngsters lined up daily for their pot likker at the Polk City school near Lakeland when Dr. Wilkins and his staff, traveling via a specially equipped trailer conducted a survey of six Polk County summer schools to study the health of the children and the effects on them of certain foods. Every child in the school received from one to two glasses of the "likker" a day, squeezed from canned turnip greens for the experiment. Dr. Wilkins reports that the youngsters "are brighter, and instead of being draggy as we found them, are on their toes. They have been eating more and gaining weight." Dispenser of the liquid to her second grade children is Mrs. Blanche Ward, teacher.

Nutrition Investigations and Services

By RUTH BLAKELY, B.S., M.S.

In Charge of Field Laboratory

In the United States dietary surveys have shown that a large part of our people eat diets that fall below the recommended allowances of many important food substances. This is true of both rural and urban populations and of children as well as adults. Inadequate diets are more common in families of low income but are found in all income levels.

In spite of known dietary shortages, we have very little data on the exact kind, severity, and prevalence of the deficiency diseases which result from inadequate diets. In order to attack the problem of prevention we must have more information concerning the type of deficiencies in the area concerned, the people affected, and the resulting disabilities.

Health departments throughout the country have recognized such a need, but Florida is the first state to *do something about it*. The Florida State Board of Health has recently set-up the unit known as Nutrition Investigations and Services which consists of a staff of people especially trained in different phases of nutrition work, with a full-time medical director. A mobile laboratory set-up in a trailer has been outfitted with the most modern equipment for carrying out "on-the-spot" tests.

Thus, in Florida, nutrition is taking its place in the health department along with sanitation and communicable disease control as a major function in maintaining health. The problem of food and nutrition is one of our greatest and most complex problems in modern preventive medicine. Public health officials in Florida recognize that nutrition problems present a whole new sphere of health department responsibility.

Appraisal of nutritional status is just as essential in prevention and control of malnutrition as a tuberculosis survey is in the prevention and control of tuberculosis. Investigation as to the extent and location of existing malnutrition and thorough studies of the relationship of signs, symptoms, and disabilities to specific deficiencies will provide some of the fundamental information needed to develop more nearly adequate health programs in the communities of Florida.



The success of a large portion of the recent nutrition study in Lake County lies at the door of Lake County Health Officer Dr. R. J. Dalton, who was on hand at the least appeal to aid in the smoothness of Dr. Wilkins' work. He seems very pleased with the latter's examination of the young high school boy, in which he is scrutinizing possible signs for acne. It was emphasized that all "complexion upsets" aren't necessarily acne in the adolescent. What Dr. Wilkins wants to know is what connection diet has in such upsets, and in acne itself. Is there a vitamin deficiency, for instance.

The nutrition unit devotes a great deal of time to investigations and fact-finding, but also includes education, demonstration, and consultation services. The investigations are directed toward determination of causes of various conditions found which suggest nutritional relationships. *Obviously it would be impossible to carry out preventive measures without a knowledge as to causes of disabilities found.*

Malnutrition is not a single disease but a multitude of diseases. There are probably as many combinations of nutritional diseases as there are single communicable diseases. It is obvious then, that we are dealing with an extremely complex problem. We are not tackling the whole field of nutritional disturbances in one study, but are trying to answer one question at a time.



Testing the hemoglobin of thousands of children is the job for only those who have a knack with children, who "keep their patience" and are thoroughly trained in executing their work quickly and without upsetting the individual child . . . This young fellow is liking the routine well enough. That little prick on the finger was so quick you couldn't say "Boo." In fact, he returned with the next group of children and asked for a second test. This child, as most of them are in this issue of Health Notes, is a "future citizen" of Tavares.

Among the various problems which have already presented themselves are: anemia and borderline anemia, hookworm infestation in relation to nutrition and anemia, anemia of pregnancy, toxemias of pregnancy, relationships to various infections diseases, various skin conditions, granulated eye lids, poor vision, retarded or abnormal bone development, relationships to learning ability, effects of nutrition on working capacity, relationship of diet to dental caries, retardation of the aging process of good nutrition, effects of submineral vitamin C intake on health, and relationship of nutrition to mental hygiene and emotional stability.

The following methods are being used to get at the facts:

1. Physical examinations
2. Laboratory tests
3. Histories
4. Diet records
5. Therapeutic tests

The so-called "therapeutic test" is one of our most useful tools and is being widely used. In every-day language it means "try-and-see". When a given sign, symptom, or disability suggesting a nutritional deficiency is found, it is studied carefully to determine what shortages, if any, are suggested. Then those nutrients thought to be lacking are "tried". They are usually furnished in concentrated form to different groups. Periodic observations are made to "see" whether improvement occurs. Much checking and re-checking must, of course, be done in order to get results which are accurate and reliable. Otherwise false conclusions might be drawn.

The many studies conducted in Florida by Doctor Ouida Davis Abbott have thrown a great deal of light on the anemia problem. In 1945, Abbott, Townsend, and Ahmann* published the results of a study showing that anemia gives a serious problem among rural children in certain sections of this State. Of 2,205 white children tested in five counties 42.3 per cent were found to have hemoglobin values bordering on the anemia level or lower. These findings indicate a serious health problem. All of the possible causes of such pale thin blood are not known. Hookworm disease and malaria most certainly play a part but anemia is also present in many children who do not have either of these diseases.

This new work in Florida is being watched with interest by public health authorities throughout the nation. Several foundations are giving temporary financial assistance to the State Board of Health toward carrying out this public health approach to the cause of malnutrition. These include the Milbank Memorial Fund, the Williams-Waterman Fund for the combat of dietary diseases, and the Nutrition Foundation.

*Abbott, O.D.; Townsend, R.O., and Ahmann, C. F.: Hemoglobin Values for 2,205 School Children in Florida, Am. J. Dis. Child. 69:346-349 (June) 1945

Can Health Departments Get The Facts?

By WALTER WILKINS, Ph.D., M.D., *Director
Nutrition Investigations and Services*

Who IS malnourished? How many of us are suffering from malnutrition? Why? How serious is this malnutrition? What kind is it? Every person who is interested in the health of Florida would like to have such information.

What do we mean by malnutrition anyway? When is a person malnourished? Is it only when he is actually starving, is it when he fails to reach an optimal nutritional state, or is it somewhere between these two extremes? Such a question is not entirely impractical since, as yet, we have no commonly accepted yardstick for measuring nutritional status. For this reason we hear widely divergent statements as to the prevalence of malnutrition.

If we use the starvation standard, we can say that we have little or no malnutrition among the population. If we are not satisfied with anything less than the best, and feel that anything below optimum nutrition is malnutrition, then we must admit that few of us could measure up to this standard. Undoubtedly, we will find that we have all levels of nutritional status represented in our population.

Lack of facts concerning the types, extent, severity, and distribution of malnutrition leaves a serious gap in our knowledge of the nature of the problem. In working with any group, we must be armed with such facts before we can make an effective attack on its nutrition problems.

The community looks to the health department for collecting, correlating, studying, interpreting, and dispensing information concerning the kind, extent, severity, and prevalence of communicable diseases. Where gaps have existed, public health has often developed its own techniques. Could health departments follow this same pattern in dealing with nutrition problems?

The science of nutrition is relatively new. Procedures for nutritional diagnosis have developed slowly and few of them have been adapted for use with large groups. The term malnutrition includes a group of diseases with as many manifestations as there are combinations of deficiencies of calories, protein, minerals, and the various vitamins. There is no one test upon which we can depend for complete nutritional appraisal. It seems reasonable that if appraisal techniques for large groups are developed, public health will have to develop them.



Dr. Wilkins reports that the cooperation of both teachers and children in the Tavares schools was "something to be proud of." Here a bunch of first graders are lined up "to see the Doc." Each one had high speculation as to "how red is my blood." The Lake County study was in cooperation with the Florida School-Community Health Education Project sponsored by the Kellogg Foundation through the State Department of Education and the State Board of Health.

As yet our facilities for nutrition appraisal are far from complete but they are serving as a starting point for the development of more satisfactory and comprehensive plans for nutrition appraisal by health departments. Facts gained by such procedures are basic to any rational nutrition program in much the same way that diagnosis is basic to treatment.

We must look to agriculture for an adequate supply of the foods which provide essential nutrients. We must look to organized education to help stimulate in both children and adults a desire to do those things necessary for good nutrition and glowing health. Only the health department can get the basic facts about the health status of large groups as affected by the food they eat. We must look to them to collect, correlate, study, and interpret data, and to furnish information concerning the types, extent, severity, and distribution of malnutrition. Then parents, teachers, doctors, dentists, nurses, nutritionists, agricultural workers, and others can attack the various aspects of the nutrition problem much more effectively, with far larger forces, and on a much wider front.



Big brother takes his turn with the Doc, too. Dr. Wilkins is equally popular with this age group. His is a gift for putting the younger age at ease, a running line of tension-releasing conversation and all ages leave the specially equipped trailer declaring he's a "good Joe." In this high school group in Tavares as in a group in Leon County, Dr. Wilkins had a special eye for acne. The big question is what connection does diet have with acne, if any . . . Here, in some cases, Dr. Wilkins recommended vitamin supplements which were dispensed by the teachers. No thought was given to personal hygiene habits nor to the adequacy of the home diets . . . Some cleared up entirely, some responded reasonably well, and others just didn't. It was stressed that it was not a "treating routine," but rather an experiment "just to see." The Tavares Kiwanis Club contributed funds for a majority of the vitamin bill, most of which consisted of vitamins B and B plus multi vitamins.

A ONE DAY DIET RECORD

Is it Representative of Florida's School Childrens' Eating Habits?

Is Malnutrition Man-Made Through Carelessness and Slovenly Habits?

or

Are There Other Contributing Causes?

The State Board of Health, Entrusted with the Welding of Florida Citizens, Wants to Know

One-day diet records made on a number of children have presented some interesting facts about the group eating patterns of



This pin-up girl with her dimples showing isn't bothered at all by the idea that Dr. Wilkins is taking a sample from the vein instead of the fingertip . . . This procedure is followed when a number of supplementary tests are desired. Dr. Wilkins seems to be having a pretty good time too. This ease with children, some say, along with being one of the most noted in his field, is one of his attributes. With all this, hitting a youngster's vein is something of a tedious job.

our school children. For instance, in one large high school, over 40 per cent of the 740 students did not have any *fruit* for the day. This was a typical school day in February—when *citrus fruits* are plentiful in Florida.

In one Junior and Senior High School 35 per cent of the children who *did not* eat in the school lunch had no *milk* for the day. Almost 70 per cent of the students did not have any *eggs*. Those eating in the school lunchroom had superior diets to those who ate elsewhere. The colored children in the same community fared even less well. Over 65 per cent not eating in the school lunch did not have milk or meat during the day. Almost 20 per cent came to school *without breakfast*. Over 75 per cent did not have eggs during the day.

Thus it would seem that an important job lies ahead before every child in Florida has an adequate daily diet.

Anemia

More than 3,500 Florida children have been given over 15,000 hemoglobin (How red is your blood?) tests this past year. Although only a small percent had severe anemia, many had border-line or sub-clinical anemia, as judged by the usual standards.

The anemia was more prevalent in rural than urban groups and more in colored than in white children. Parallel hookworm examinations confirmed widespread hookworm infestation and this most certainly contributed to the anemia. *However*, many children with *negative* hookworm reports had low hemoglobin levels.

In three counties, Polk, Hamilton, and Lake, groups of children were given iron and other supplements daily in an effort to determine the cause of the "pale, thin blood". This testing is still in progress.

These blood tests brought to light, among other things, the fact that the hemoglobin level of an individual varies during the course of the day and it is usually lower in the afternoon. Since this finding has been confirmed, two hemoglobin tests have been made daily on every child—one in the morning and one in the afternoon.

School Feeds 'Pot Liquor' to Pep Up Listless Children

The youngsters at the Polk City School, northeast of Lakeland, drank "pot-liquor," daily from the middle of September to the middle of December and it apparently did them a world of good. Every child in the school had from one to two glasses a day squeezed from canned spinach and turnip greens. It was given to them as a part of a nutrition investigation in six Polk County summer schools.

"There is no doubt but that the children were brighter after the pot-liquor," says Dr. Wilkins. That is about the way it looked to Mrs. Hodges, principal, too. She said, "After beginning the pot-liquor they played more. Boys who didn't play basketball became enthusiastic about it. They were brighter in class, and they ate so much more in the school lunchroom that they ran up our costs. We couldn't fill them up."

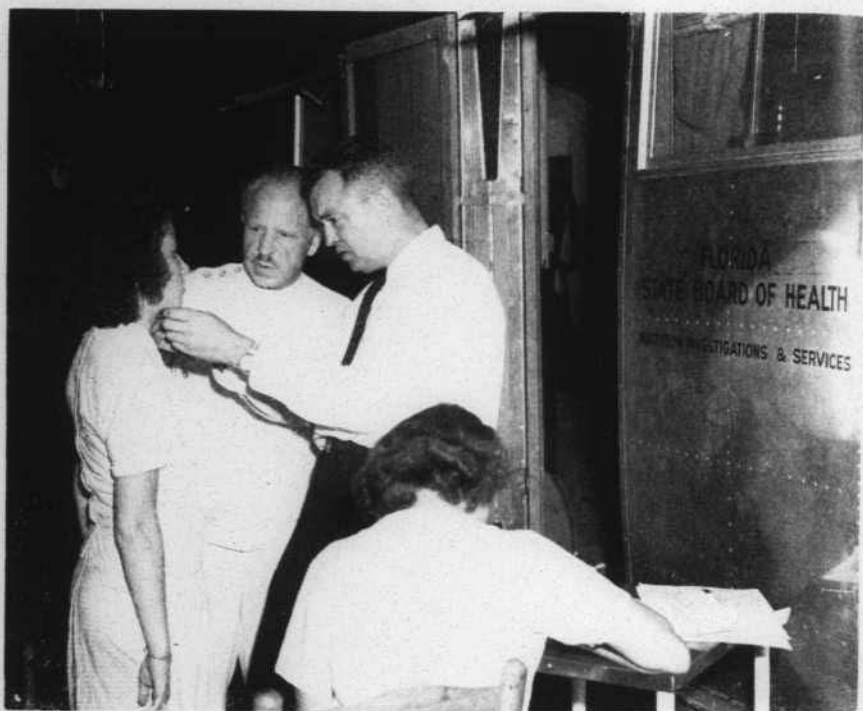
Here is a record of weight gains of the children in Mrs. Hodges' room between September 18 and December 2:

Ray, 11 pounds
George, 7 pounds
J. C., 6 pounds
Moi, 4 pounds
R. L., 10 pounds
John, 13 pounds
Phillip, 6 pounds
Peter, 4 pounds
Jack, who is ill, 4 pounds
Roberta, 9 pounds
Lucille, who did not like the juice and drank
little of it, 2 pounds
Margaret, 5 pounds
Peggy 5 pounds, and
Emily, who was getting over an attack of flu,
loss of 4 pounds.

Normally, one could count on a gain of a pound or two in the two and a half months of the test according to Dr. Wilkins. The gain cannot be attributed to the opening of school and the start of school lunches because the Summer schools begin in April.



When the State Board of Health's Nutrition Investigations and Service crew arrived in Polk County to work with the summer school children one of the first jobs was to consult and plan with the local personnel closest to the problems. At left we see Wm. P. Patterson, in charge of the Health and Physical Education division; Mrs. Blanche Burns, County School Lunch Supervisor; Miss Julia Snook, supervisor of instruction; County Superintendent of Public Instruction Frank Brigham; Dr. Lawrence Zell, Health Officer, and Mrs. Doris Jamison, school nurse. Coming on around the table with their backs to the camera are Dr. Wilkins, Miss Ruth Blakley, and just out of the picture Mrs. Elva Tromater, all State Board of Health personnel. Six schools were studied and all recommendations were on an experimental basis. The children in one, received Vitamin C, another group got iron and various vitamins, another, pot likker, and still another group was given Vitamin A to see what effect it would have on granulated eyelids, for instance.



Both Dr. Dalton, Lake County Health Officer and Dr. Wilkins, who are more than usually interested in the nutritional problems of the school age, are giving this young lady a thorough going-over. She certainly looks all right here, so it's difficult to say whether they're amazed, displeased, or unhappy. There are myriads of obvious nutritional deficiencies, however, which show themselves immediately to the trained eye. Whatever the diagnosis it is safe to say that this pair took care of the situation in a creditable manner.

300 Volunteers Gulp Vitamins In Acne Study

One of the first large scale controlled experiments designed to help determine the relation, if any, of nutritional factors to adolescent acne is now being conducted in Leon High School, Tallahassee, where about 300 students visited the school clinic each day to gulp down a vitamin capsule.

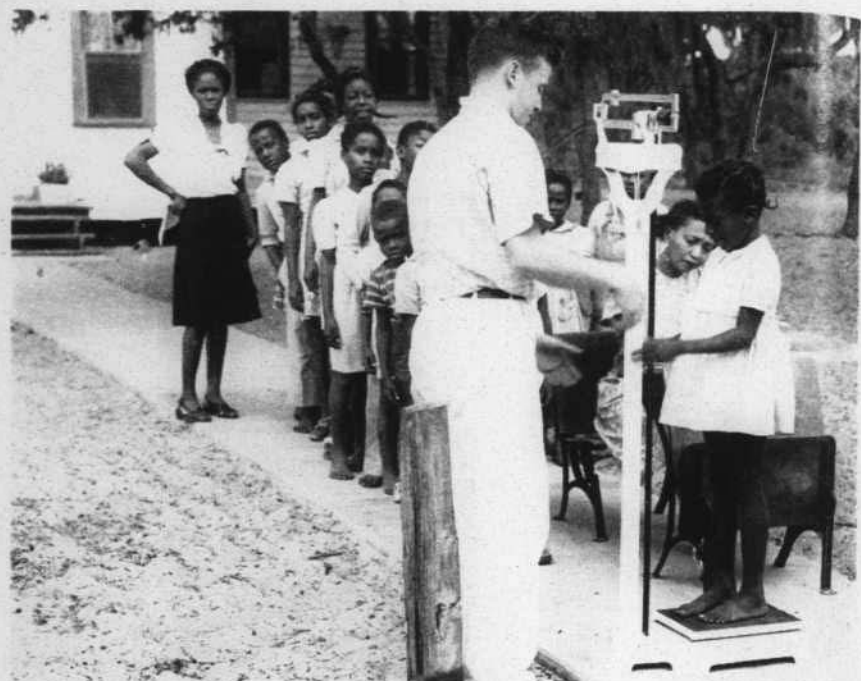
All volunteers, the students are participating in the tests after it was carefully explained that this was not treatment and no promises of cure, or even of improvement, were held forth. They were examined twice by Doctor Walter Wilkins at the start and after a stated period to find out if any definite trend of improvement could be noted.

The practical application of any findings will lie in translating the successful vitamin or vitamins into terms of the foods in which they are contained, and passing the information on to practicing physicians. At present acne patients are usually put on low carbohydrate diets and warned away from fats and sweets. Looking for a positive nutritional relationship, however, Doctor Wilkins wants to find out what *should* be eaten instead of what *shouldn't*.

Acne is a serious thing to those who have it, and the Tallahassee students are as anxious as the State Board of Health to have new information about it.

A similar test on acne was made on a group of college girls attending Florida State University. Another smaller group of high school students in Tavares also participated in the test.

Some of the materials used in the tests were paid for by the *Kiwanis Club* in Tavares and the *Elks Club* of Tallahassee which were very generous in the support of the projects. The Squibb pharmaceutical house also furnished some of the testing supplies.



Well, look who's here. Is this little girl with the well cared-for pigtails embarrassed with her gain or loss . . . Being a girl, we'll bet it's the former message, Tom West, member of the crew, is reading. The children in this school were given supplementary minerals and checked carefully each month from January to June, and a satisfactory weight gaining story is reported. It so happened that one of the teachers was more anemic than any of the children, some of whom had pretty low hemoglobins. Her blood is reported "redder" today, and her weight at a satisfactory figure.

Limited Physical Inspections

Since Nutrition Investigations and Services began its survey nearly a year ago to study malnutrition and nutritional deficiencies more than 2500 children have received limited physical inspections for signs suggesting such upsets. The examinations included the gums for sponginess suggesting vitamin C shortage; lips for cracks, sores, etc, suggesting vitamin B₂ shortage; eyes for scaring, inflammation, granulated lids, etc, often related to vitamins B₂ and A; teeth; thyroid; skin; hair; etc. One of the amazing indications that came to light was the apparent deficiency of vitamin C in Florida school children. A great many of the children had granulated eye lids and this condition sometimes clears up when extra vitamin A is added to the diet. Acne was found to a significant degree in the adolescent groups. Acne is probably usually not a nutritional disease in the ordinary sense but some cases do respond to extra amounts of certain vitamins. This condition requires much more study.



Any tardiness in the nutrition investigation program in Lake County had to be faced and not blamed on insufficient personnel. For Dr. Wilkins reports that the young lady to the right filled all the requirements of an extra nurse. This young pretty busied herself with swabbing the other youngsters' fingers, keeping them in line ready for his or her turn with "the Doc," and being a general all around handy man . . . She's another who wanted to see "how red my blood is" every hour on the hour . . . In background are Mr. West and Miss Blakley, SBH personnel.

Lost: Valuable Minerals and Vitamins

Has your food, before it gets to your table, lost most of the minerals and vitamins that nature put into it? As they grow in the garden or field, most foods contain important minerals and vitamins. Often, however, many of these are lost before we eat the food. Why? Here are some of the main reasons:

Refining: We Americans have learned to use "refined" foods. Such foods have lost many of their minerals and vitamins. When wheat is made into white flour, the darker parts are taken out so that the flour will look "fine and white," will keep better, and have better baking qualities. The darker parts of the wheat grain contain a large part of the minerals and vitamins which nature put into the wheat. We feed them to the cows, pigs and chickens. Should they be better fed than we are? White sugar, white syrup, white cereals, macaroni, and spaghetti are other examples of refined foods.

"Enriched" flour is white flour to which has been added some of the iron, thiamin, riboflavin, and niacin which were lost when the brown part of the wheat was removed. Make sure that all refined grain products you use are enriched.

Aging and wilting: Sometimes we lose Vitamin C by allowing vegetables to lie around and become old and wilted. If we gather or buy our vegetables when they are fresh, and keep them in a cold place, we save much of this vitamin. Freezing or proper canning of strictly fresh vegetables and fruits saves most of their vitamins and minerals.

Soaking: Several of the minerals and vitamins which are in fresh vegetables are easily soaked out by water. If these mainerals and vitamins were colored, we could see them because they would color the water. You know that if beets are cut up and soaked in water, the coloring leaks out into the water. Well, this is just what happens to various vitamins and minerals when we soak cut-up vegetables.

Cooking in too much water: Even more minerals and vitamins soak out into the water in which we boil vegetables. If we throw away this water, we throw away minerals and vitamins. If we cook vegetables in just enough boiling water to keep them from sticking, and use the liquid (pot liquor) to drink in soups, we save minerals and vitamins. If only a small amount of water is used for cooking, there won't be any pot liquor left.

Cooking too long: This is still a common error. Long boiling spoils flavor and color and destroys some vitamins. Vegetables look better, taste better, and have more food value if we add them to boiling water and cook them only until they are tender. Ten to twenty minutes is long enough to cook most vegetables and many require less than this. Holding vegetables on steam tables for long periods has the same effect. Some of us like certain vegetables cooked with pork. The smart housewife starts her meat cooking first and adds the vegetable when the meat is nearly done. This avoids overcooking the vegetable.

Adding soda: Don't add a "pinch of soda" to vegetables to "keep them green" or to "make them tender." If vegetables are not too old and are properly prepared, they will be tender. The added soda knocks out vitamins B₁ and C.

To get all the minerals and vitamins from food:

1. Choose foods rich in minerals and vitamins.
2. Use fresh or properly canned or frozen vegetables.
3. Don't soak out minerals and vitamins.
4. Cook vegetables in as little water as possible. Use cooking water (pot liquor), if any.
5. Serve vegetables raw or cook quickly in water which is already boiling.
6. Never add soda to vegetables.

Stop, Look, and Listen! Danger Signals

Did you ever hear anyone say, "I ate something that made me sick?" Yes, you've heard that many times. On the other hand, did you ever hear anyone say, "I'm sick because of something I *didn't* eat?" Probably not. Yet, many of us could say it truthfully.

When we say we are hungry, we mean we crave food. Our stomachs are empty and we want to eat. This is called *hollow hunger*. Almost any kind of food, if we get enough of it, will satisfy hollow hunger.

But there is another kind of hunger that may not be so well known to us. It is called *hidden hunger*. Hidden hunger is very common. It results from diets which lack important food substances. We must remember that these diets may satisfy our hollow hunger so that we *don't feel hungry* in the ordinary way. The body

has many ways of warning us that it is not getting the right kind of food. These warnings are *danger signals*. Often we don't recognize these distress signals or don't realize that they are hunger signals.

The signals of hidden hunger that we ourselves feel and experience are called *symptoms*. Those that other people, especially the doctor, observe in us are called *signs*. A malnourished person would be unlikely to have only one of these symptoms or signs. He would be more apt to have several of them at one time. We must remember that people can be malnourished in a great many ways, just as they can have many different "catching" diseases. There are many food materials. You may lack some of these while another person lacks others. This is why we have different kinds of hidden hunger.

Here are some danger signals which may be due to hidden hunger. Let your doctor be the judge.

How You FEEL Lack of energy, feel lazy
 Easily tired
 Poor appetite
 Sore mouth, burning tongue
 Itching, burning eyes
 Eyes tired easily
 Frequent colds and sore throat
 Headache (some forms)
 Feel older than your years

How You ACT Cross and fussy
 Lack mental alertness
 Brood or worry over trifles
 Poor eyesight (some form)
 Night blindness
 Can't do much work
 Finicky about food
 Act older than your years

How You LOOK Much overweight
 Much underweight
 Dull lifeless hair
 Poor posture
 Rough Bumpy skin

Pale skin due to pale thin blood

Poorly shaped bones

Pot Belly

Spongy, bleeding gums

Bad teeth

Dull eyes

Look older than your years

**Nutrition for You" by courtesy of Authors.

*Quoted from "Nutrition for You" by Walter Wilkins, M.D., Ph.D., French Boyd, B.S.

Stretching That Food D O L L A R

Blind buying is bad business regardless of the size of your food budget. If you have to consider the cost of the food you buy, if you have to do a bit of figuring to get all of the things you need with the money you have to spend, these suggestions may help you.

Plan Carefully

Plan at least three meals at a time. Include all of the things you need for good nutrition.

Compare your menus from day to day. If you've exceeded the budget one day, use less expensive foods the next.

If you eat two meals at home and one out, get milk, fruit juice, and eggs at home and save money.

If you don't get enough milk, fruits, and vegetables at your boarding place, get them for lunch. It's poor economy to omit the foods you need for good health.

Buy Carefully

Cash and Carry. Grocers who offer charge accounts and delivery service usually have to charge more than the cash and carry stores.

Non-stable foods (fruits, vegetables, meat, etc.), are the foods on which prices vary most. Buy them where you can get the most in quality and quantity for your money.

Look before you buy. Compare prices of difficult foods of the same type. Are turnip greens cheaper today than

spinach? If so, buy turnip greens. Don't let your menu be a tyrant; it should be a guide.

Is meat a budget buster? Cheaper meats can be used for stews, pot roasts, and hash. They provide just as much food value as expensive meats. If well prepared, they taste good, too.

Beans to the rescue! When meat is expensive and your budget is about to break, beans can help to save it. They supply most of the food materials furnished by meat.

Read labels! They list all materials used to make the packaged food and tell how much the package holds.

Sometimes surprising and interesting information is tucked away in fine print. Remember that a package which looks large may hold less than one that looks smaller. The weight is what counts.

Economical amounts. Some foods are cheaper if bought in large quantities. For example, tomato and citrus fruit juices and evaporated milk cost less per serving if you buy them in large cans.

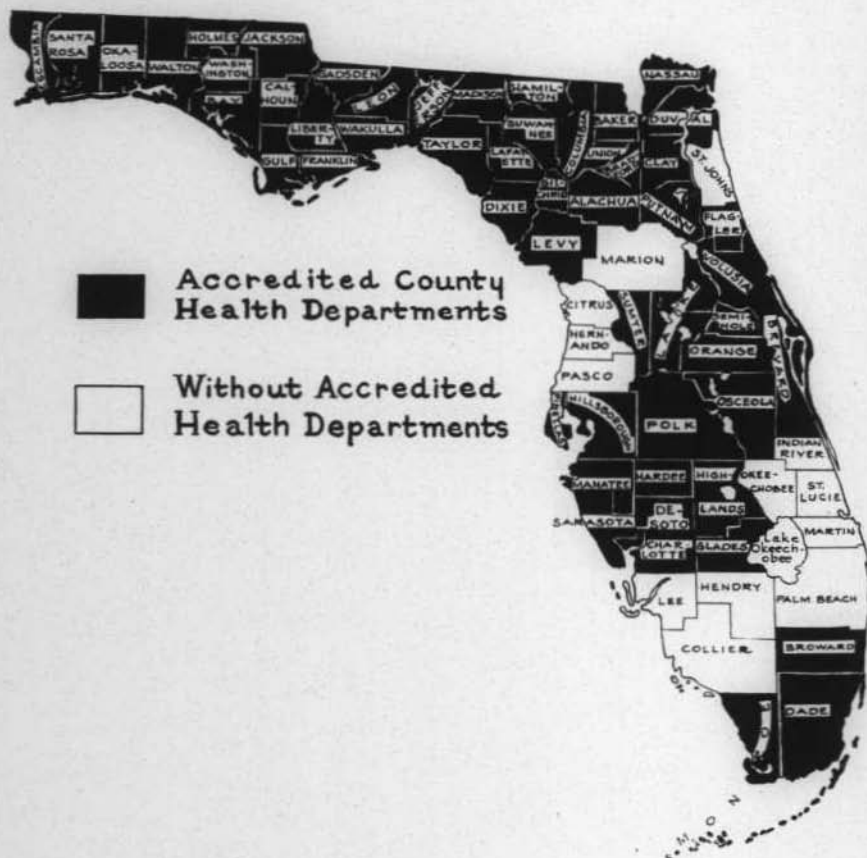
Fancy foods and fancy packages. Grading, especially of fruits and vegetables depends largely on uniformity of the size and color and not on food value. You can usually save money by buying "lower grade" canned fruits and vegetables. Cheaper grades of canned fruits often have less sugar and this gives a double advantage if you are watching calories. An expensive package does not increase the nutritive value of the food it holds.

*"Nutrition for You" by courtesy of Authors.

NUMBER OF CASES OF SPECIFIED DISEASES BY COUNTIES
FOR THE MONTH OF MAY.
(April 26th - May 31st)

County	Estimated Population	Cancer	Diphtheria	Dysentery-Ameb.	Dysentery-Bac.	Meningitis-Ep.	Polomyelitis	Scarlet Fever	Syphilis	Tetanus	Tuberculosis, Pul.	Typhoid Fever	Typhus Fever	Undulant Fever	Whooping Cough
Alachua	38,245								13		57				2
Baker	6,326														
Bay	55,200	1						1	25		5				1
Bradford	11,600								6						1
Brevard	20,750								15		4	1			1
Broward	55,100		1						89		14				1
Calhoun	8,230														
Charlotte	4,470								1		1				
Citrus	5,427								1						
Clay	11,600								5		1				
Collier	4,957								1				1		5
Columbia	17,250								10		3				1
Dade	336,300	43		1		2		5	108	2	40			1	150
DeSoto	6,854								8						
Dixie	4,925														
Duval	302,200		2	2				2	228		24		1		37
Escambia	118,900	4					1		92		11		1		
Flagler	2,652														
Franklin	8,900								3		7				2
Gadsden	31,041								39		8				
Gilchrist	3,466								1		1			1	
Glades	2,281								7						
Gulf	7,040								5						
Hamilton	8,731								3						
Hardee	8,885								1						
Hendry	5,066								7						
Hernando	5,700								1						
Highlands	19,300	2							11		1				
Hillsboro	220,100	21	3				2	4	138	1	35		3	2	19
Holmes	14,627		1						4						
Indian River	9,130								6		2		1		
Jackson	34,550								2		3				
Jefferson	11,066			3					1						1
Lafayette	3,995								5						
Lake	28,300								42		14				6
Lee	26,300								17		2				
Leon	37,100		1	1					107					2	
Levy	9,902								3		3				1
Liberty	3,193													1	
Madison	15,537	2							19		4				
Manatee	27,100	1							9		2				1
Marion	36,900	2	1						14		1				
Martin	6,094								3		1				1
Monroe	21,200		1			1			3		7				4
Nassau	10,900								3		1				
Okaloosa	17,650										3				
Okeechobee	2,919								4						1
Orange	94,200			1				1	67		18				30
Osceola	10,800		1				1		2						
Palm Beach	126,700						5		95		4				
Pasco	13,729								12						
Pinellas	147,300							1	52		17		3		
Polk	123,800		2		1			1	68		8				7
Putnam	17,837								36		5				
St. Johns	22,300								9		2				
St. Lucie	13,400		1						28		2				19
Santa Rosa	17,400								1		1				
Sarasota	20,600								9		8		1		
Seminole	25,600		1						17		3				1
Sumter	10,417								10						2
Suwannee	17,800								11						
Taylor	10,738								1	1	1		1		20
Union	6,051								28						
Volusia	61,600								24		11				3
Wakulla	5,059								1		1				9
Walton	13,871										5				
Washington	11,889								5		1				
Total		81	14	9	1	3	9	15	1616	4	349	1	12	7	333

STATE OF FLORIDA



HN 5-46



HAS YOUR CHILD HALF A HOG'S CHANCE?

This was the question asked in the Ladies Home Journal a year or so ago. We can't improve on the thought, so we quote "Did you ever sit down after supper some night and think it over . . . why Johnny's bones aren't straight; why Susie can't seem to grasp her problems; why Jimmie's teeth have always given him trouble? Your children are no exceptions. They are like 9,000,000 others in this land of plenty. They are suffering from the national disease; malnutrition. And this is no reflection on you more than it is on us all . . . We spend millions a year to improve the bones, growth, beauty of our livestock and the land they feed on, but we plow under our best crop; our kids. If Johnny doesn't like milk, he doesn't drink it. But our farmers don't talk a balanced diet for hogs so lightly. The farmer knows it takes calcium to make good meat and bones for a hog. "The quality of Johnny is just as important. And why, in this democracy, where every child's right to free education is taken for granted, it is not also taken for granted that he has a right to a well nourished body?"



Florida **HEALTH NOTES**

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JACKSONVILLE - AUGUST, 1947 - VOL. 39 - No. 8

A Report of Progress

The State Board of Health

Hon. Millard F. Caldwell
Governor of Florida

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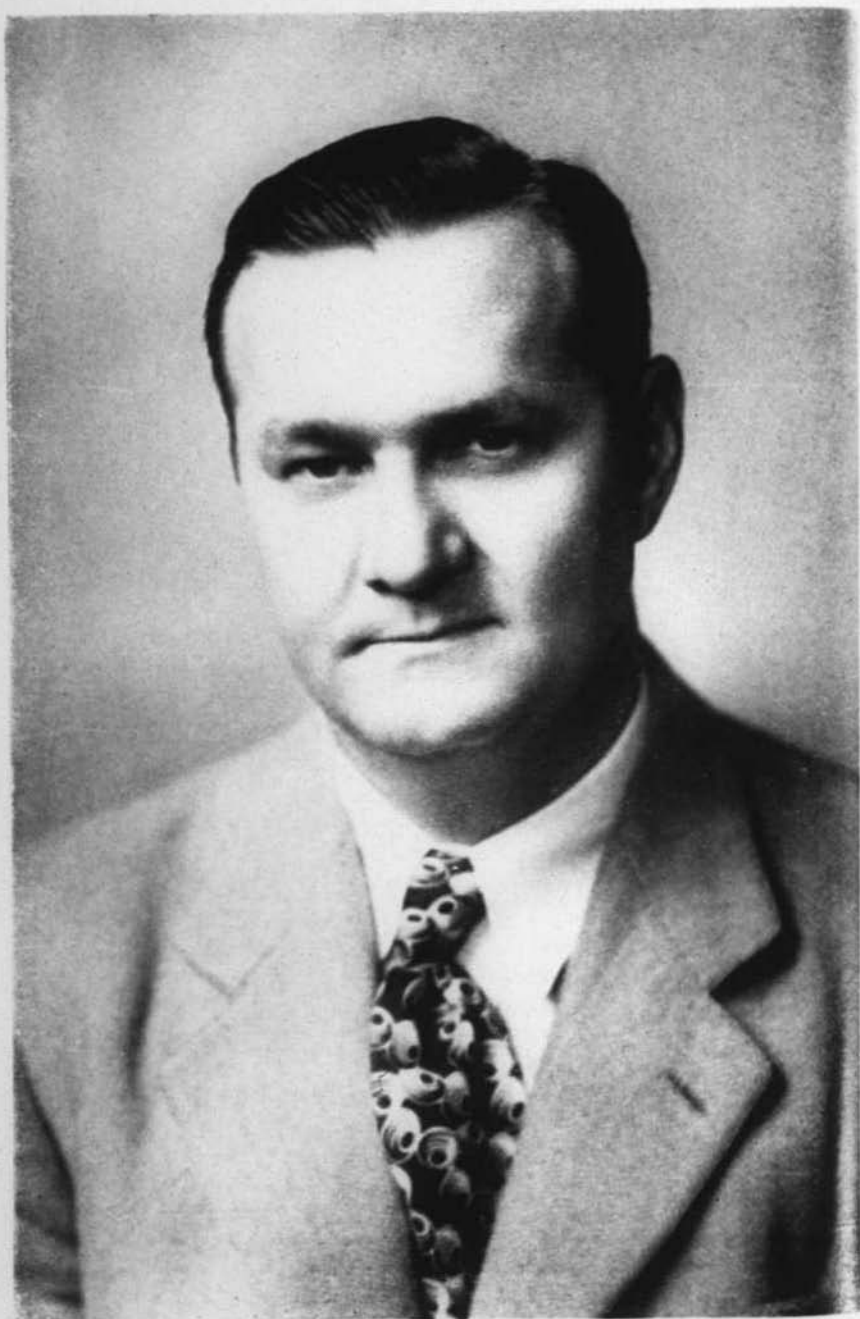
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Florida **HEALTH NOTES**

ESTABLISHED 1890

A Report of Progress

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DR. WILSON T. SOWDER,
State Health Officer

A native of Virginia and a graduate of the College of Medicine of that State's University, Dr. Sowder has devoted his entire professional life to public health control. From the time he received his Master of Public Health degree at Johns Hopkins University in 1934 he was associated with the U. S. Public Health Service until his appointment by Governor Caldwell as State Health Officer of Florida. He was on loan to the Florida State Board of Health from 1940 to 1944, serving as venereal disease control officer both in Pensacola and Hillsborough Counties; then, at the state level as director of the Division of Venereal Disease Control and finally as director of the Bureau of Local Health Services and assistant State Health Officer. Early in 1944, he was recalled by the USPHS and assigned to a post at Dallas, Texas. He returned to his present position as State Health Officer in September, 1945.

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A REPORT OF PROGRESS

By **WILSON T. SOWDER, M.D.**

State Health Officer

In the August 1946 issue of Health Notes, Florida's outstanding health problems were summarized and an indication was given as to some of the things necessary to cope with these problems. The theme of this issue will be the progress being made. Since it is extremely difficult to measure progress in public health programs in terms of cold statistics showing death rates, trends of disease, etc., particularly over a short period of time, most of the emphasis will be given to the improvement in the organization facing the various problems with which we have to contend. The volume and the efficiency of the work of any organization is dependent upon the people who are in it. With this in mind considerable space in this issue is being given to a few of the people in the State Board of Health and the affiliated county health departments who are rendering distinguished service. It is emphasized that it is impossible in a single issue to give recognition to all of the large number of persons who deserve it. The persons presented in this issue were selected more or less at random, in some cases because pictures and biographical material were easily available. It will be the policy hereafter, in future issues of Health Notes, to present from time to time persons who are working in the field of public health in Florida.

The State Board of Health is proud of many of its achievements but it is proudest of the type of personnel whom we are attracting to our cause. No organization attracts good people, however, unless it deserves it. The reason that we are getting and keeping good personnel is that the people of the State of Florida have shown over a period of many years that they earnestly desire a good public health program. This feeling has

been impressed upon our legislators and other public officials, including our Governor. These officials have shared this feeling and have in very many instances, especially in the case of our Governor, been leaders in pointing out the need for better public health in the state. It is very doubtful if any health department in any state has received quite so much support from their Governor as we have been fortunate enough to receive from our Chief Executive. It is very doubtful if any legislature in any state has given quite so much support to public health as has the present legislature of this state. Florida has also been fortunate enough to receive hearty support for its public health program from its local officials both county and municipal. Not only has there been a steady increase in the number of county health departments established but there has been an extremely praiseworthy tendency towards streamlining and consolidating local organizations in this field. With few exceptions we no longer have in Florida multiple overlapping and competing health departments representing municipalities, counties, school boards and voluntary agencies doing the same work in the same area. Nearly everywhere in Florida, officials of school boards, municipalities and counties have joined their efforts and are carrying on a public health program through a single agency, a county health department.

Going back to the state level, the recent legislature upon the recommendation of the Budget Commission and with the strong support of the Governor, adopted the entire public health program outlined in the January issue of Health Notes and provided financial support for this program to the extent of more than doubling existing appropriations. With the new appropriation it will be possible to provide for state aid in the establishment of a health department in every county in Florida. Such state aid accounts for about one-half of the funds received by the State Board of Health from state sources. A very substantial sum was appropriated for the control of that dread disease—cancer—and lesser amounts for industrial hygiene, sanitary engineering, mosquito control, improvement and expansion of our laboratories, etc. It would, however, be a disservice to the

public health program to intimate that since State Board of Health funds have been doubled that all programs can be carried on at twice their present level. As a matter of fact except for activities specifically provided for little expansion will be possible. Seventy-five percent of the increased appropriation was for county health departments and for cancer control. The remainder was divided amongst the various activities mentioned plus some provision for the increasing cost of operating the organization, a problem which we share with every public and private organization. Since there were only 36 counties with health departments two years ago the additional appropriations for county assistance will not increase substantially the amount of aid which presently organized counties are receiving. The new appropriation was based upon the assumption that the State Board of Health should be prepared for the organization of a county health department in every county in the state. It is gratifying to report that since the beginning of the last biennium the number of organized county health departments has increased to 55. In addition, five counties have committed themselves to establish a health department during the present fiscal year. No doubt we are not far from the goal of having a health department in every county in the state.

Some other accomplishments are briefly summarized as follows:

★ The Training Center for public health workers operated in cooperation with the Alachua County Health Department at Gainesville has done excellent work under the direction of the county health officer, Dr. Fran Hall. To date a total of 56 sanitary officers, 25 public health nurses, 11 undergraduate nurses, nine physicians, and ten clerks have been given formal training. In addition to this, a substantial number of additional personnel have profited from briefer periods of observation and orientation there. This center is jointly financed by the State Board of Health and the Commonwealth Fund.

Another undertaking which got underway in January with the assistance of the Commonwealth Fund was the Field Tech-

nical Staff, under the direction of Dr. L. L. Parks. This staff consists of a physician, two sanitarians, two nurses and two clerks who visit various county health departments at their invitation and lend advice and assistance in carrying on a well-rounded public health program.

★ During the late winter and spring, with funds obtained by special grant from the Federal Children's Bureau, 36 young physicians were employed and were loaned to various counties, about 25 in all, to assist in the school health program. According to all reports this undertaking was an outstanding success. These young physicians were available for the short period of time between their graduation from medical schools and the beginning of their hospital internship on July 1. Thousands of children in the state were immunized for the first time against smallpox, diphtheria, tetanus, whooping cough and typhoid fever. Thousands of physical defects were discovered such as malnutrition, anemia, poor eye sight, poor hearing, heart disease and crippling orthopedic defects. The regular staff of the various county health departments will follow up these cases and make every effort to see that these defects are referred to the appropriate voluntary or official agency.

★ In cooperation with the Rockefeller Foundation, a survey of the occurrence of typhus fever in the state was carried on by Dr. E. R. Rickard of the Rockefeller Foundation. A large number of cases of this disease were discovered which had previously been unreported. The survey also enables us to better plan and carry out the typhus fever control program which we have had for several years. Our efforts in the control of typhus fever have been directed by Mr. George Bote, of the U. S. Public Health Service, who has been assigned to the Bureau of Sanitary Engineering and have been confined largely to rodent control. Rat proofing has been considered to be the key to the whole problem although experimental work has been carried on to determine the effects of dusting rat infested premises with DDT in order to kill the typhus bearing flea.

★ Last summer the state was visited by an unusual outbreak of poliomyelitis. No state health department and no county health department can go through a more trying experience than such an outbreak brings. This is due largely to our lack of knowledge of any effective means of controlling the spread of the disease. During the year 1946, 572 cases were reported with 39 deaths. Although many other diseases outranked poliomyelitis during the year in the death toll exacted this disease always creates an unusual amount of hysteria and apprehension because it is mysterious in many ways and because it affects children. Since this outbreak, Dr. Edwin G. Riley, our epidemiologist, with assistance from the National Foundation for Infantile Paralysis, has made a survey of the cases that occurred in order to determine the final outcome as to the deaths, crippling affects, recoveries, etc.

★ A continued campaign has been carried on against venereal disease which is one of Florida's foremost health problems. Due to the unexpected loss of anticipated financial support from the federal government our Rapid Treatment Center, housed temporarily on the former Army Transport Ernest Hinds, was closed during the spring. With the new fiscal year, however, a new Rapid Treatment Center was opened in quarters obtained at the former Naval Air Station in Melbourne, Florida.

★ A new Division of Industrial Hygiene was established and this program will consist mainly in investigating the industrial health hazards, actual and potential, in the various industries of the state. The personnel of this division will work closely with the State Industrial Commission and will keep that agency advised of its findings.

★ A cancer control program was carried on in a very small way with funds available from the federal government. However, with the new state appropriation available, a real effort will get underway during the present year. The money appropriated was not for strictly welfare purposes and will be used to discover cases of cancer early enough to be cured and to provide financial assistance to indigent persons with

cancer who have a chance to be cured. State cancer funds have been allocated to the various county health departments on the basis of the number of deaths from cancer occurring during the year. Cancer control will from this point, therefore, be one of the major activities of the State Board of Health and of its affiliated county health departments.

★ In the field of tuberculosis control four mobile units are in operation, some of them for the first time. During 1945, 100,000 persons were x-rayed but we hope to increase this to 500,000 during the present year. All persons whose x-ray shows tuberculosis or any symptoms of tuberculosis are followed up by the local health department. Every effort is made to get infected persons into one of the State Sanatoria. We were fortunate during the past year in that the Tuberculosis Board expanded sanatorium facilities by opening new centers at Marianna and at Tampa. A case register covering 1,931 infected persons, with accurate information as to their whereabouts and the stage of their disease, was established in the central office of the Bureau of Tuberculosis Control.

★ Continued investigations in the field of malnutrition and anemia were made by Dr. Walter Wilkins and his staff of the Nutritional Investigations and Services Unit.

★ During the year the Bureau of Sanitary Engineering reviewed and approved plans for the construction of water and sewage plan facilities, the cost of which amounted to about \$20,000,000.

★ The program aimed at the control of the malaria bearing mosquito was continued and great emphasis was placed on residual DDT spraying in homes. With the new appropriation, The Division of Entomology, which replaces the old Bureau of Malaria Control, will be able to render greater assistance to cities, counties and anti-mosquito districts interested in the mosquito problem.

★ The Bureau of Laboratories has continued to expand its activities. Its staff has been strengthened and studies have been carried on concerning not only the prevalence of hook-

worm in the state but of the various degrees of infestation. An optimistic view is made possible in this field for the first time by the discovery that in spite of the high prevalence of hookworm infestation amongst our children, the majority have only a very light degree of infestation and little harm is done in these cases by the parasite. In spite of this, the number of cases of heavy infestation is substantial and our efforts to eradicate hookworms will continue. These efforts will consist largely in improving sanitary facilities.

★ In the field of vital statistics the Board decided to streamline its organization for the collection of data on births and deaths. This activity in the various counties will be centralized in the county health department with as many sub-registrars as are necessary in various parts of the county. This reorganization is underway but will proceed slowly in order not to interrupt the efficiency of the present set up.

★ A purchasing unit was established in which all purchases are centralized and it is believed that under this set up greater efficiency and economy will be attained. Thousands of dollars have already been saved through systematic purchasing procedures.

* * * * *

Although it is gratifying to report these signs of progress it should be emphasized that much remains to be done. Ceaseless vigilance and effort is necessary if the health of the people of this state is to be brought up to an acceptable level, and further effort necessary to keep it there.

DR. R. F. SONDAG.

Director,
Bureau of Preventable Diseases

Dr. Sondag began his public health career in 1937 with the local health department's venereal disease control program in East St. Louis, Missouri. Prior to that he was in private practice in that, his native city. Rumbings came of war and, on loan from the U. S. Public Health Service, he came to Florida in 1940 and was stationed at Sebring and Sarasota in venereal disease control work. In 1942 (and still on loan from USPHS) he was appointed director of the State Board of Health's Division of Venereal Disease Control and moved up to the directorship of the Bureau of Preventable Diseases which was established in 1945. He was deactivated from Service in 1946. A graduate of the College of Medicine, University of Illinois, he is married; has two children—Susan and Butch.



DAVID B. LEE

Chief Sanitary Engineer

A native Floridan, Mr. Lee is a graduate from the University of Florida with a degree in Mechanical Engineering. He later received a Master's degree in Sanitary Engineering from Harvard University. A long-time employee of the State Board of Health (since 1932), he served in the Sanitary Corps of the U. S. Army during the recent armed conflict in command of a Malaria Control Unit in New Guinea and finally as Malaria Control Consultant for the Institute of Inter-American Affairs in Latin America.



DR. L. L. PARKS,

Director,
Field Technical Staff

Dr. Parks is one of the many physicians with the Florida State Board of Health who originally chose public health as his career and has followed right down the line. Coming to Florida from the North Carolina State Health Department he was just getting established as director of Local Health Services when war was declared. He was soon in the Pacific where he spent 33 months battling the Japs through remote control—malaria control. He was recently commended for his fine work in that field. Immediately after the Japs moved out of Manila he was appointed health officer of that devastated city, another coveted honor. He was deactivated from the Service as a full colonel. Dr. Parks received his degree of Medicine from Vanderbilt University and his Master's degree in Public Health at Johns Hopkins University.

JOHN A. MULRENNAN,

Director,
Division of Etomology

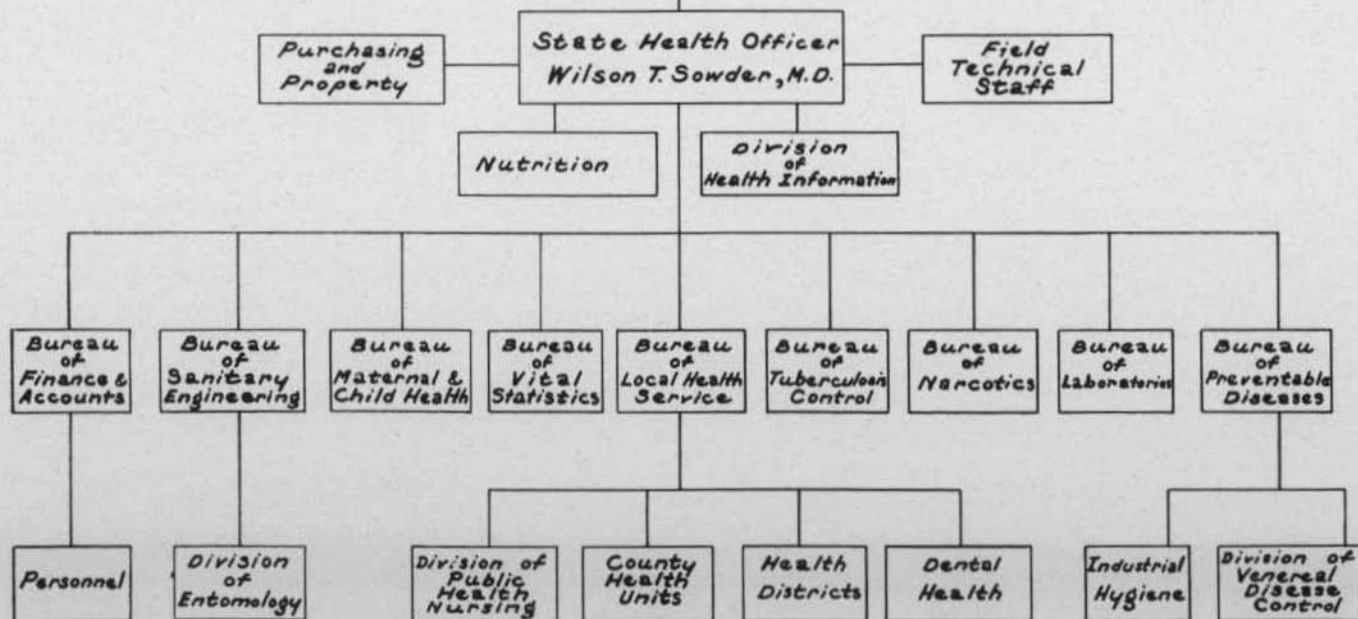
Another Floridian who has devoted his professional life to a branch of public health work (malaria control), Mr. Mulrennan nevertheless received his "internship" with the Texas State Health Department. He then returned to Florida where for a number of years he was stationed in Pensacola on a Rockefeller State Board of Health sponsored malaria control project. Later, he was transferred to the Jacksonville central office and since early 1945 has been director of the state malaria control program. A graduate of the University of Florida, he comes originally from Tampa where both his mother's and father's families are very, very early settlers.



GOVERNOR MILLARD F. CALDWELL

Board Members

Herbert L. Bryans M.D.
William Parr Ph.G.
Robert B. McIver M.D.



Above is the latest chart of the organization of the State Board of Health. Under the Bureau of Local Health Services is shown health districts. Formerly there were four, but so many counties in these districts have organized health departments that now all counties without health departments are consolidated to a single district.

A new mental hygiene program was started with the new fiscal year on July 1st. This activity will be placed with the Bureau of Maternal and Child Health and the bureau will probably be renamed the Bureau of Mental Health and Maternal and Child Health.

No separate division of cancer control has as yet been established but this activity is carried on by the Bureau of Preventable Diseases.

							Manatee	55
							Hardee	54
							Putnam	53
							Brevard	52
						Sarasota	Sarasota	51
						Charlotte	Charlotte	50
						DeSoto	DeSoto	49
						Union	Union	48
						Lafayette	Lafayette	47
						Dixie	Dixie	46
						Suwannee	Suwannee	45
						Columbia	Columbia	44
				Alachua	Alachua	Alachua	Alachua	43
				Sumter	Sumter	Sumter	Sumter	42
				Holmes	Holmes	Holmes	Holmes	41
			Polk	Polk	Polk	Polk	Polk	40
		Washington	Washington	Washington	Washington	Washington	Washington	39
		Madison	Madison	Madison	Madison	Madison	Madison	38
		Volusia	Volusia	Volusia	Volusia	Volusia	Volusia	37
		Jefferson	Jefferson	Jefferson	Jefferson	Jefferson	Jefferson	36
	Santa Rosa	Santa Rosa	Santa Rosa	Santa Rosa	Santa Rosa	Santa Rosa	Santa Rosa	35
	Okaloosa	Okaloosa	Okaloosa	Okaloosa	Okaloosa	Okaloosa	Okaloosa	34
	Walton	Walton	Walton	Walton	Walton	Walton	Walton	33
	Seminole	Seminole	Seminole	Seminole	Seminole	Seminole	Seminole	32
	Flagler	Flagler	---	---	---	---	Flagler	31
	Clay	Clay	Clay	Clay	Clay	Clay	Clay	30
	Bradford	Bradford	Bradford	Bradford	Bradford	Bradford	Bradford	29
Glades	Glades	Glades	Glades	Glades	Glades	Glades	Glades	28
Gilchrist	Gilchrist	Gilchrist	Gilchrist	---	---	---	Gilchrist	27
Levy	Levy	Levy	Levy	Levy	Levy	Levy	Levy	26
Baker	Baker	Baker	Baker	Baker	Baker	Baker	Baker	25
Hamilton	Hamilton	Hamilton	---	---	---	Hamilton	Hamilton	24
Osceola	Osceola	Osceola	---	---	---	---	Osceola	23
Nassau	Nassau	Nassau	Nassau	Nassau	Nassau	Nassau	Nassau	22
Dade	Dade	Dade	Dade	Dade	Dade	Dade	Dade	21
Bondry	---	---	---	---	---	---	---	20
Bay	Bay	Bay	Bay	Bay	Bay	Bay	Bay	19
Duval	Duval	Duval	Duval	Duval	Duval	Duval	Duval	18
Lake	Lake	Lake	Lake	Lake	Lake	Lake	Lake	17
Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	16
Highlands	Highlands	Highlands	Highlands	Highlands	Highlands	Highlands	Highlands	15
---	---	---	---	---	---	---	Liberty	14
---	---	---	---	---	---	---	Calhoun	13
Wakulla	Wakulla	Wakulla	Wakulla	Wakulla	Wakulla	Wakulla	Wakulla	12
Hillsborough	Hillsborough	Hillsborough	Hillsborough	Hillsborough	Hillsborough	Hillsborough	Hillsborough	11
Gulf	Gulf	Gulf	Gulf	Gulf	Gulf	Gulf	Gulf	10
Franklin	Franklin	Franklin	Franklin	Franklin	Franklin	Franklin	Franklin	9
Pinellas	Pinellas	Pinellas	Pinellas	Pinellas	Pinellas	Pinellas	Pinellas	8
Monroe	Monroe	Monroe	Monroe	Monroe	Monroe	Monroe	Monroe	7
Cadader	Cadader	Cadader	Cadader	Cadader	Cadader	Cadader	Cadader	6
Broward	Broward	Broward	Broward	Broward	Broward	Broward	Broward	5
Jackson	Jackson	Jackson	Jackson	Jackson	Jackson	Jackson	Jackson	4
Escambia	Escambia	Escambia	Escambia	Escambia	Escambia	Escambia	Escambia	3
Leon	Leon	Leon	Leon	Leon	Leon	Leon	Leon	2
Taylor	Taylor	Taylor	Taylor	Taylor	Taylor	Taylor	Taylor	1
1940	1941	1942	1943	1944	1945	1946	1947	

DR. GEORGE A. DAME,

Director,
Bureau of Local Health Services

Dr. Dame has been a resident of Florida for the past 40 years and hails from Homerville, Georgia. He practiced medicine in Inverness for many years where he married the former Miss Rita Savary de Muro of that city. Also served as State Senator from District No. 9. Before entering public health work he took graduate work in that field at the University of North Carolina. A member of Theta Kappa Psi, he also terms himself a "joiner" which is borne out by the list before the writer, much too long to print. However, he is a member of the Nassau County Medical Association (past president), Florida Medical Association, and many other professional groups. He has served in a number of capacities with the State Board of Health and came to his present position three years ago from the Nassau-Baker County Health Unit; is a past Grand Commander, Knights Templar of Florida. Hobbies: wild flowers, fishing, philosophy and Western stories. Has two sons, students at Emory University and Stetson University.



DR. A. V. HARDY,

Director,
State Laboratories

Hailing from Canada, Dr. Hardy, however, has spent his entire professional life in the United States. A graduate of the Medical College, University of Toronto, he spent two years in the Rockefeller hospital in Peiping, China, as an interne and resident in medicine. His whole career has been concentrated in public health work. For nine years he was director of the State Laboratory, department of preventive medicine, Iowa State Medical School. Then there was a stretch of five years as associate professor in the department of public health, Columbia University. With the advent of World War II he became associated with the National Institute of Health, U. S. Public Health Service. He assumed his current position in February, 1946. He received his Doctor's degree in public health at the Johns Hopkins University.



MISS RUTH E. METTINGER,

Director,
Division of Public Health Nursing

Miss Mettinger began her career with the State Board of Health in 1934 as director of Nurses. She had an enviable career, however, with the Visiting Nurses Association and the American Red Cross before entering public health activities. A native Floridian, she is a member of Pilot International, and recently resigned as a member of that Board because of an already too heavy Service commitment; is a past president of the Pilot Club, and currently, an officer in the Mothers' Milk Bank of Jacksonville, a service sponsored by the Pilots. She is a graduate of Roeboro Memorial Hospital, Philadelphia.

RUTH STUART ALLEN,

Acting Director,
Division of Health Information

A native Tennessean, Ruth Stuart Allen had a long career in newspaper writing and public relations work before coming to Florida as assistant state information officer, Office of War Information, in 1942. Directed own publicity bureau in Chicago for four years and was also contributing editor to Better Homes and Gardens Magazine. Became publicity consultant for State Board of Health in August, 1943, and has held present position of acting director for past two years. Plays golf; collects symphonic albums and lustreware pitchers; is interested in horticulture, agriculture and rural health conditions.





DR. WALTER WILKINS,

Director,
Nutrition Investigations and
Services

We give you an action picture of Dr. Wilkins because we think of him almost entirely in connection with his far reaching study of the causes of malnutrition among school children. He received both his degree of Medicine and PHD in Biochemistry and Nutrition at Vanderbilt University; interned in Pediatrics at Vanderbilt and Willard Parker Hospitals and was director of the Division of Child Health and Nutrition, North Carolina State Health Department. Came war and he became associated with the U. S. Public Health Service and War Food Administration as Public Health Nutrition Officer. He assumed his current duties in April, 1946. He is chairman, Sub-Committee on Public Health Nutrition and a member of the committee on Nutrition Surveys, both of the National Research Council; President, American School Health Association, member of the Florida Medical Association and American Public Health Association.

DR. C. M. SHARP,

Director,
Bureau of Tuberculosis Control

Here is another Georgian who has chosen Florida in which to live and to further his professional career. He received his degrees of Bachelor of Science and Doctor of Medicine at Emory University; has been with the Florida State Board since early 1946. Before the war he was Superintendent and Medical Director of the Stony Wold Sanatorium in Saranac Lake, New York, and also Superintendent and Medical Director of the Georgia State Tuberculosis Sanatorium. During the recent conflict he served as Assistant Chief of the Tuberculosis Control Section, U. S. Public Health Service, Washington, and prior to coming to Florida, was Tuberculosis Control Consultant, USPHS, District No. 4, New Orleans.





M. H. DOSS,

Director,
Bureau of Narcotics

Mr. Doss reports that he "grew up" near Valdosta, Georgia, on an eleven thousand acre farm; that he worked as a paper boy, cow puncher, surveyor, turpentine woods rider, salesman, pharmacist and "once did a job of shoveling snow off streets of Alliance, Ohio, because of suffering from a particular disease known as 'Hunger Pangs'."

Continuing his nothing-dull routine he married Miss Mercia Montgomery of Apalachicola only to be arrested immediately by her irate parents on the count of kidnapping. One year later saw them remarried, however, plus the parents' blessings. They have two children, Jim and Connie. His hobbies continue to be in keeping "horses, hunting." He's an expert with a rifle and pistol. Has been connected with the Narcotics department of the State Board of Health since 1932. Has one ambition to retire as narcotic inspector, the position he now holds. (He has five more years before he reaches that 30 year limit cited in the Retirement Act.)

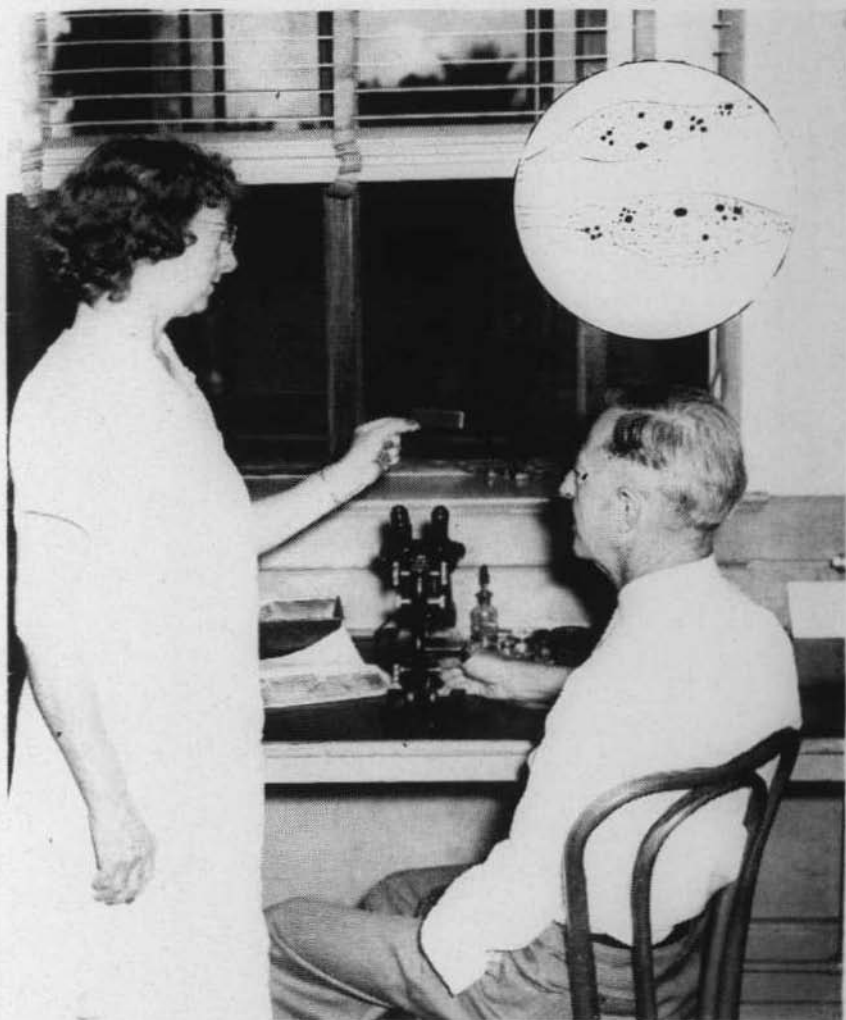
MISS JULE O. GRAVES

For 21 years Miss Graves has been a well-known figure in Florida's public health nursing field. Particularly is she thought of in connection with the state midwife program and her constant battle to raise the standards of those engaged in that work. Happy with her retirement through the recent ruling of the State Board of Health that all persons 65 years of age must retire (she will benefit from the retirement act), she nevertheless immediately took a position in Georgia in the office of a private physician. She expects to return to Florida in the not too distant future, however, and will make her home in Pinellas County.



MRS. JANET BELL

Mrs. Janet Bell recently covered her microscope at the Tallahassee branch Laboratory (where she was director) and prepared to retire from the State Board of Health's roster of personnel. This, in line with the Board's ruling which calls for retirement at the age of 65 years. Mrs. Bell was with the State Laboratories for more than 20 years and is one of four from that department which is taking advantage of the ruling this summer. Her hobby is flowers but she also admits that she "stitches a fine seam and broils a tasty steak." She will benefit by the retirement act.



MISS PEARL GRIFFITH AND H. P. BROWN

These two faithful employees will step down in a few weeks and relinquish their microscopes to younger but not less enthusiastic bacteriologists. For more than 30 years each has watched the State Board of Health grow and become more and more effective from year to year. They've seen the number of yearly tests in the state laboratories grow from a few thousand to well over a million; were well conditioned to the policies and thinking of the Agency long before it was permitted by the Legislature to take its program into the local communities where public health problems arise and must there be controlled, until today 55 counties have active health departments. Miss Griffith has just rounded out 34 years as senior bacteriologist and twice during that time she served as acting director of the Laboratories. She was one of the many women who stepped into a man's shoes when the Service called, and carried on a creditable job until "the men came home." Mr. Brown, associate bacteriologist, completed 37 years of service early this year. Each will benefit by the Retirement Act.



DR. T. E. CATO

Health Commissioner, Dade County

Another Tennessean who has chosen Florida in which to practice public health control, Dr. Cato also, has devoted his professional life to public health work. He received his degree of Medicine at the University of Tennessee, and his Master's degree in public health at Johns Hopkins University. Most of his working years have been spent in local health departments, just as he is serving today as Health Commissioner of Dade County. He was engaged as a county health officer for ten years in West Virginia prior to coming to Florida.

DR. FRANK V. CHAPPELL.

Director,
Hillsborough County
Health Department

Dr. Chappell was born in Jacksonville, and with the exception of serving a residency at the Good Samaritan Hospital, Phoenix, Arizona, his activities have been confined to his native state of Florida. He received his Bachelor of Arts Degree at Southern College, his Medical degree at the University of Tennessee and his Master's degree in public health at Johns Hopkins University. He practiced medicine in Madison, Florida, for a number of years before entering public health work. He also has a creditable Service record in the Army's Malaria Control Unit. He has been associated with the State Board of Health many years, both on the local and state level, and has served in his current position since returning to civilian life. Is married and has two daughters, Lindsey and Judy.



DR. FRANK HALL,

Director,
Alachua County Health Department

Dr. Hall came to Florida as director of the Alachua County Health Department nearly three years ago. He was the county's first director of public health, and under his guidance the In-Service Training School, in connection with the unit, (financed by the Commonwealth Fund) was developed and is well advanced in its program to train public health personnel in problems peculiar to Florida. He came to Gainesville from the Alabama State Health Department where he was connected with the Bureau of Preventable Diseases in the special study of diphtheria; received his degree in Medicine at the University of Tennessee and his Master's degree in public health at Johns Hopkins University. He is a member of the Alachua, Florida, American Medical, American Public Health, and American School Health Associations.

**DR. LELAND H. DAME,**

Director,
Orange County Health Department

A product of "near the Georgia-Florida line, on the banks of the Suwannee River," Dr. Dame received his Medical training at Emory University. He has been connected with the State Board of Health since 1933 when he was appointed a member of the three-man-board by Governor Schultz. Later he resigned from the policy making board and took the position of district health officer; has been active in local level public health control ever since.





DR. JOHN W. McCLANE,

Director,
Nassau-Baker Counties Health Unit

For the past 45 years Dr. McClane has been a Floridan. After receiving his medical training at Barnes Medical School, St. Louis, and Loyola University, Chicago. He entered private practice in St. Petersburg in 1914, later becoming associated with the U. S. Public Health Service. In fact, his career has been "in again, out again" with private practice and the USPHS, for in 1932 we find that he filled a long out-of-the country term with that Agency. Has served in present position for the past three years and is extremely proud of the record his unit is setting in the two counties.

DR. CHARLES J. RHOEM,

Director,
Walton-Okaloosa-Holmes
Health Unit

Here is a young man straight out of the middle west who chose Florida in which to pursue his career in public health. Furthermore, he was emphatic in the section he chose (Okaloosa, Walton and Holmes Counties). Dr. Rhoem received his medical degree at Loyola Medical School, interned at Cook County Hospital, Chicago, with a surgical residency at St. Francis Hospital. Served in the Medical Corps, U. S. Army, and had a short term of private practice just prior to coming to Florida in August, 1946.





DR. ROBERT D. HIGGINS,

Director,
Volusia County Health Department

The Daytona Beach Realtor Association lists Dr. Higgins as "an able, determined, energetic, magnetic man who is a graduate of the University of Louisville College of Medicine." A Kentuckian with a World War I, Medical Corps record, Dr. Higgins came to Florida and his present position in 1942. He has a degree in public health from Harvard University and also received a training grant from Rockefeller Foundation. He is listed as a "Fellow" in the American Public Health Association.

DR. FRANK L. QUILLMAN,

Director,
Seminole County Health Department

Since receiving his Florida medical license in 1935, Dr. Quillman has worked continuously in public health. A graduate of the University of Illinois Medical College with graduate work in public health at the University of North Carolina, he served as health officer of Orange County, assistant director of Osceola, director of the tri-county unit Franklin, Gulf and Wakulla and went to the Dade County Health Department in 1943 as director of the Maternal and Child Health division. Took over current position in November, 1945.





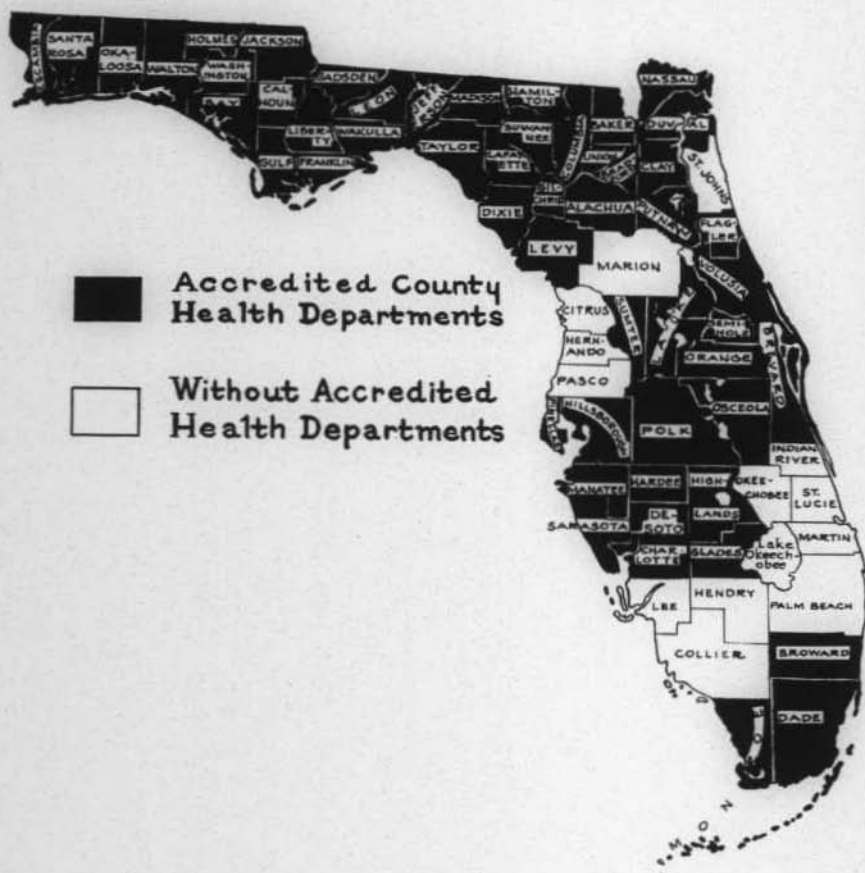
PINELLAS COUNTY HEALTH DEPARTMENT BUILDING, CLEARWATER

Florida has a number of outstanding, fairly-new health department buildings and we proudly show here one of the typical modern plants. Three other outstanding ones are at Panama City, Starke and Key West.

NUMBER OF CASES OF SPECIFIED DISEASES BY COUNTIES,
FOR THE MONTH OF JUNE.
(May 31st - June 28th)

County	Estimated Population	Cancer	Diphtheria	Dysentery-Ameb.	Meningitis-Epi.	Poliomyelitis	Scarlet Fever	Syphilis	Tuberculosis	Typhoid Fever	Typhus Fever	Undulant Fever	Whooping Cough
Total for Year		445	123	29	39	45	219	9728	2169	28	97	26	1225
Total for Month		68	19	1	6	4	12	1208	526	5	9	5	245
Alachua	38,245					1		64	4	2	1	2	2
Baker	6,326							3					
Bay	53,200	1						28	2				3
Bradford	11,600							2			1		
Brevard	20,750							13	4				6
Broward	55,100		2				1	59	5			1	12
Calhoun	8,230							1	5				
Charlotte	4,470							1	1				
Citrus	5,427							1	1				
Clay	11,600							3	2				
Collier	4,957							3	2				
Columbia	17,250							14	4				
Dade	336,300	38					2	106	64	1	1		112
DeSoto	6,854				1			2					
Dixie	4,926												
Duval	302,200		1				2	258	35	1			22
Escambia	118,900							41	9				
Flagler	2,652							5					
Franklin	8,900							3	2				
Gadsden	31,041		2					20	167				
Gilchrist	3,466							2	3				
Glades	2,281							2	1				
Gulf	7,040							9	3				
Hamilton	8,731							8	1				
Hardee	8,885							1					
Hendry	5,066							6					
Hernando	5,700								7				
Highlands	19,300							6					
Hillsboro	220,100	24	2		3		3	82	19		1		14
Holmes	14,627							5					
Indian River	9,130							2	2				3
Jackson	34,550							7	5				
Jefferson	11,066							1	5				6
Lafayette	3,995												
Lake	28,300							17				1	
Lee	26,300	1						16	5				
Leon	37,100						2	63	10				
Levy	9,902							13		1		1	
Liberty	3,193								7				
Madison	15,537							8					
Manatee	27,100		1					10	1				
Marion	36,900							15	5				
Martin	6,094							9	3				1
Monroe	21,200				2			5	8				
Nassau	10,900							2	4		1		1
Okaloosa	17,650							3					
Okeechobee	2,919							2					
Orange	94,200		1					59	27				30
Osceola	10,800							4	1				
Palm Beach	126,700		9			3		28	9				8
Pasco	13,729							1	17				
Pinellas	147,300	1					2	37	28		1		1
Polk	123,800	2		1				41	6		1		21
Putnam	17,837							12	2				
St. Johns	22,300							10	1				
St. Lucie	13,400							9	2				
Santa Rosa	17,400							5	2				
Sarasota	20,600							6	3				
Seminole	25,600							20	3				
Sumter	10,417							1	10				
Suwannee	17,800		1					7	1				
Taylor	10,738							5					
Union	6,051							20	5				
Volusia	61,600							21	9		2		3
Wakulla	5,059							1					
Walton	13,871	1							1				
Washington	11,889							4	3				

STATE OF FLORIDA



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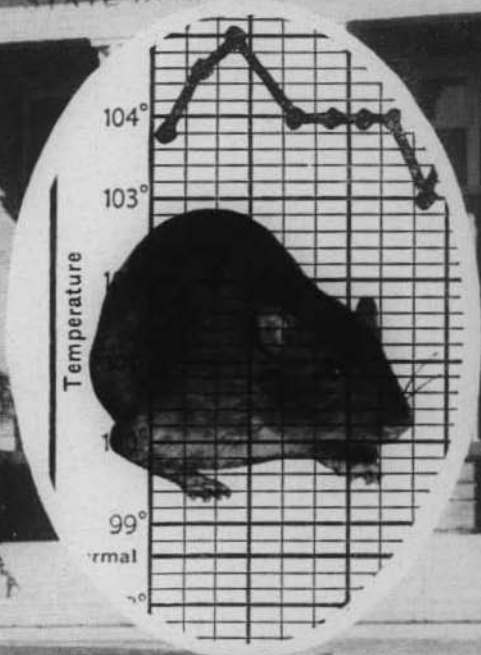


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STATE BOARD OF HEALTH



Florida **HEALTH NOTES**

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JACKSONVILLE - SEPTEMBER, 1947 - VOL. 39 - No. 9

Typhus Fever Survey

The State Board of Health

Hon. Millard F. Caldwell
Governor of Florida

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Florida **HEALTH NOTES**

ESTABLISHED 1890

TYPHUS F E V E R SURVEY

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SEPTEMBER 234



Typhus fever was contracted here . . .

Adapted from the report of
DR. E. R. RICKARD, Rockefeller Foundation,
and
DR. EDWIN G. RILEY, Epidemiologist
Florida State Board of Health

★ Typhus Fever Survey

Most people are familiar with the nursing service, the maternal and child health clinics, sanitary inspections and various of the other standard services offered by their local health departments but the matter of a survey and a typhus fever survey may not be generally understood.



... And also here.
(Photos by RSA)

It might be said, "What do we need a typhus fever survey for and what does it mean, anyway? I know we have typhus fever in Florida, I know of several cases off hand, myself. From what the doctors tell me they know what the germ is that causes it. I know it is carried by rats and that many buildings are being rat-proofed to control the rat and therefore stop the disease. I have read in the papers that a pretty good vaccine has been developed against typhus fever and a lot of the boys in the service were given the stuff resulting in very few cases among them although they were in places where there was a lot of typhus fever. It seems to me that we know a lot more about typhus fever than we do polio, for instance."

That roughly sums up the general idea that many of us have on typhus fever and it is all true, but not the whole truth. As far as polio is concerned, the research laboratories have not yet given us the knowledge and methods that they have for typhus fever so that we do not have enough basic information of the disease to make possible a study as outlined here. We must have certain knowledge upon which to build more.

We are far from knowing all about typhus fever. Diseases are like people—we frequently think we have them classified and tucked away in a niche when they slip away and turn out to be different than we thought them. We do know the germ causing typhus fever but many things about it are unknown. We know that the rat carries the disease and it is spread to man by the bite of the rat flea but the conditions under which it is spread from rat to rat we know little about and also the part played by other "bugs" living on rats. It is true that the rat-proofing of buildings has been effective in reducing or eliminating the disease in many places and yet this excellent procedure may not be the whole answer to the problem of prevention in Florida. As far as a vaccine is concerned, there are three kinds of typhus fever which occur in the world, two of these do not occur in the United States. It was against one of these "foreign" types that the effective vaccine was prepared. A vaccine does exist against our typhus (Murine—meaning rat) although we feel that its real value has not yet been demonstrated.

Recently a new drug has come into use that holds promise of helping to reduce the severity of the disease though as yet it has not been sufficiently tested to definitely say that it fulfills its promise.

We also have a laboratory test, the so-called Weil-Felix test of the blood which has been in use many years. Recently another type of test has been perfected which makes a slightly different test of blood. The new test is much more sensitive and shows positive for years after a person has had the disease which is not true of the Weil-Felix test.

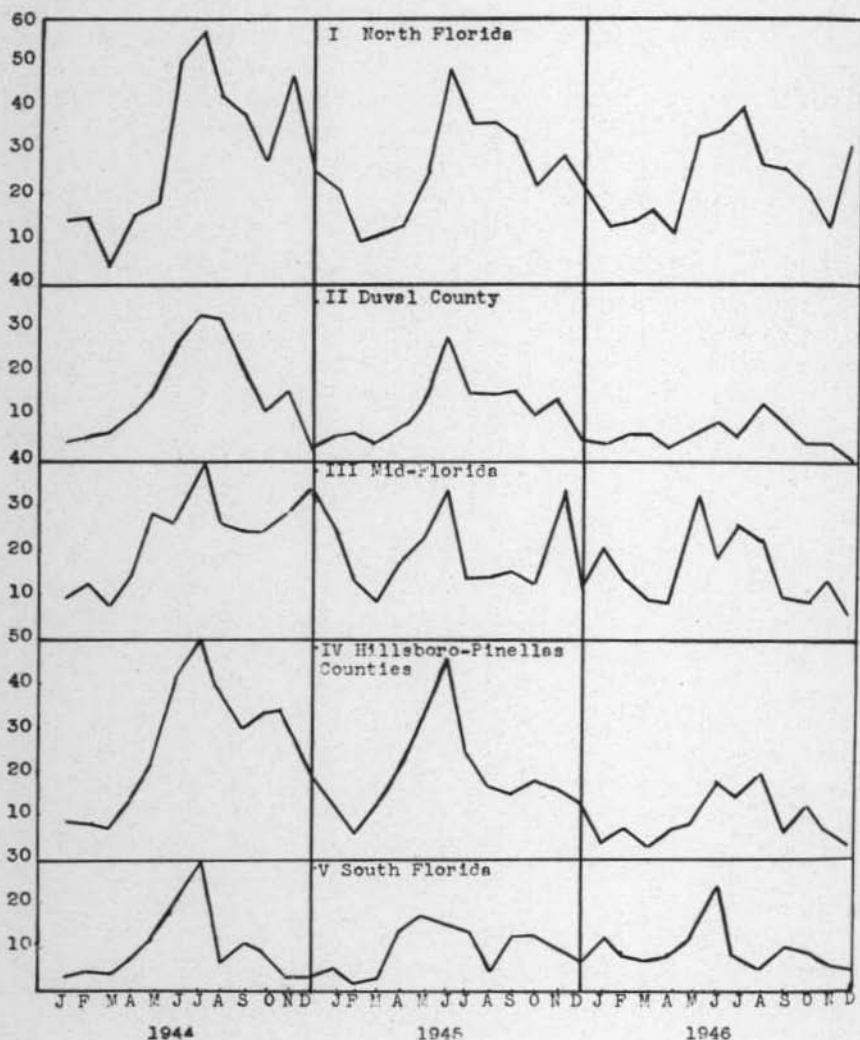
By using the new test mentioned above, testing the blood of rats, it has been found that in some areas up to 100 per cent of the rats have had typhus fever at some time during their life. This is rather frightening but if we remember that the infection is carried to man by the rat flea, louse and mite which usually stay rather close to rats and their nests we can see why there are less chances of man becoming infected, than we might at first think, although the possibilities are appalling.

What are the conditions necessary for the spread of the disease to man? It would appear that the more rats there are around the better chance there is for a flea to get to a man, and yet, just how many rats must we have and how many fleas must a rat have? Again, how do rats carry the disease into areas where they previously haven't had it? All of these may seem simple questions which have no bearing on the problem but if we are to prevent the disease most effectively we must seek the weakest link in its chain of transmission and cut the cycle there. It is to get at these and other "do not knows" in our knowledge of typhus fever that the division of typhus fever survey labors.

Since public health is primarily interested in humans they would seem to be the place to start in any study of the disease. Florida records since 1918 show that there were not over four cases reported a year until 1926 when 16 were listed. The number has increased until now the record shows about 400 a year. We might accept this but for the fact that Georgia and Alabama right next door to us have many more cases reported.

Chart II

Seasonal Distribution of Cases in Different Regions of State



Do we have less than they or is our information incomplete?

A preliminary investigation revealed that our records are not complete. To fill up our deficiency lay investigators were trained to uncover cases from hospital records, laboratory records and any other source from which the information was available. The period 1944, 1945 and 1946 was picked in order that the yearly trend could be determined. Under the close supervision of a physician the investigators visited every case possible occurring during that time. A complete history was taken of each attack which was later evaluated by the physician in charge in order to rule out those cases which were obviously not typhus fever. Questions were asked to determine where the person may have contracted the disease. This was simple in some instances where other cases had occurred in the same place. In most cases, however, the problem was not quite so simple and the decision had to be arrived at by a thorough investigation of the home, place of work and other places frequented by the individual. A housewife living and working in a ratty home was much more likely to have contracted her infection there than in a local store from which no other cases had been reported—where she might spend twenty minutes a day shopping. A dockworker or warehouse man was most likely infected at his place of work. With experience the investigator probably approached a true interpretation of this factor although errors no doubt occurred. Each case was asked if they knew of other persons who had the disease. Typhus fever is a disease which is not easily forgotten and those persons who have it have a common bond of suffering which makes each victim interested in others also afflicted.

Now, what use are these facts put to? First of all, we have determined why Florida appeared to have less typhus fever than our neighboring states. We learned that whereas we had had 496 cases reported in 1944, 380 in 1945 and 420 in 1946 we really had nearer 1234, 1945 and 793 in the respective years. It can be seen from these figures that the percentage of cases reported to the State Board of Health was higher in 1946 than the previous two years due to the interest stimulated by the presence of investigators. We also learned a little better where the cases are occurring. We have known for a long time that we had many cases in Jacksonville, Tampa, Pensacola and Nassau County, for instance, but other counties are revealed as having more cases



Along with the rat proofing program which is carried on in many sections of the state but which is intensified in four sections, Bartow, Jacksonville, Tampa and Pensacola, also is the DDT dusting work to control the rat flea which carries typhus fever. The rat proofing is work done under the supervision of the local health department and the cost of materials and labor are borne by the property owner or individual who contracts for the work. However . . .



The ten per cent DDT powder which is allotted to counties on the basis of typhus fever cases reported, is furnished by the U. S. Public Health Service and channeled through the State Board of Health to the local community. Dusting is also under the direction of local health department in chosen rat-infested areas, under houses, along rat runs, in attics and in harborages similar to the one above—a pile of old lumber. (Photos by RSA)

than we might have expected. An analysis of the places in which these people contracted their disease—as explained above—reveals something that was not previously shown clearly. It was found that 52 per cent of the persons infected had contracted their infection in the home and the largest percentage of cases falling into any group was that **engaged in doing housework**, another example of where the home is the safest place!

TABLE ONE
OCCUPATION OF PATIENTS IMMEDIATELY PRIOR TO ILLNESS

EMPLOYED IN BUSINESS ESTABLISHMENTS	TOTAL	No. of Cases 964	Per Cent. 47.4
Food Handling	Total	422	20.6
Groceries, bakeries and meats		209	10.4
Restaurants, bars and hotels		78	3.8
Food processing plants		30	1.5
Feed stores		27	1.3
Dairies and beverage bottling		27	1.3
Warehouses and docks		26	1.3
Drugs		25	1.2
Non-Food Handling	Total	542	26.6
Professional, technical and clerical		119	5.8
Factories, garages and shops		107	5.3
Travelling (conveyance operators, salesmen, etc.)		70	3.4
Dry goods, sundries, jewelry, radio		52	2.5
Construction (carpenters, painters, plumbers, etc.)		50	2.4
Railway and express companies		36	1.8
Military camps and installations		31	1.5
Furniture, lumber, hardware		24	1.2
Miscellaneous		18	0.9
Barber and beauty shops		12	0.6
Laundries and cleaners		10	0.5
Banks		6	0.3
Junk and salvage		4	0.2
Theaters		3	0.1
NOT EMPLOYED IN BUSINESS ESTABLISHMENTS	TOTAL	1073	52.8
Housework		526	25.8
Students and pre-school		379	18.6
Farming		140	6.9
Retired or invalid		28	1.4
Grand Total		2037	100.

TABLE TWO—LIST BY COUNTIES OF CASES AND SUSPECT CASES INCLUDED FOR INVESTIGATION IN THE SURVEY.

County	Population	Total Officially Reported Cases For Three Years	Distribution of Cases by Years			Total Cases or Suspect Cases From Survey	Average Yearly Rate per 100,000 Inhabitants
			1944	1945	1946		
Alachua	38,254	4	54	30	29	113	100
Baker	6,326	4	12	8	4	24	128
Bay	43,188	1	12	3	4	19	15
Bradford	10,730	3	3	6	5	14	44
Brevard	19,399	0	3	10	2	15	26
Broward	50,442	8	10	11	6	27	18
Calhoun	8,225	1	3	5	3	11	45
Charlotte	4,220	0	0	0	0	0	0
Citrus	5,427	0	13	9	2	24	147
Clay	10,038	9	11	4	2	17	57
Collier	4,957	1	0	1	0	1	7
Columbia	17,136	16	23	9	9	41	80
Dade ¹	6,633	4	1	0	3	4	20
Miami ²	251,542	157	89	89	97	275	37
DeSoto	6,854	2	11	7	4	22	108
Dixie	4,926	6	2	4	8	14	95
Duval ³	67,401	10	19	9	9	37	18
Jacksonville	206,442	117	162	129	63	354	57
Escambia ⁴	61,958	15	4	5	7	16	9
Pensacola	43,304	159	55	70	60	185	142
Flagler	2,652	1	0	0	1	1	13
Franklin	8,062	1	0	2	1	2	8
Gadsden	30,992	13	16	10	19	45	50
Gilchrist	3,466	1	2	3	6	11	106
Glades	2,281	1	1	0	1	2	29
Gulf	7,010	1	3	2	7	12	57
Hamilton	8,731	0	3	0	0	3	12
Hardee	8,585	0	16	7	3	26	101
Hendry	5,066	0	0	1	1	2	13
Hernando	5,672	0	2	1	0	3	18
Highlands	16,220	6	3	5	2	10	21
Hillsboro ⁵	83,368	23	57	48	17	122	45
Tampa	124,476	172	208	149	69	426	124
Holmes	14,627	7	17	10	6	33	76
Indian River	9,079	4	3	3	4	10	37
Jackson	34,509	2	12	14	11	37	35
Jefferson	11,066	2	9	6	6	21	64
Lafayette	3,995	2	2	8	6	16	133
Lake	27,946	21	18	10	12	40	50
Lee	23,593	2	9	10	6	25	35
Leon	35,451	15	14	10	17	41	38
Levy	9,902	1	2	9	3	14	47
Liberty	3,193	0	0	0	0	0	0
Madison	15,537	4	10	5	11	26	55
Manatee	26,803	5	6	9	4	19	24
Marion	35,132	17	24	21	20	65	62
Martin	6,094	1	0	1	0	1	5
Monroe	19,018	3	1	1	1	3	5
Nassau	10,859	39	20	23	18	61	185
Okaloosa	16,155	4	8	8	4	20	45
Okeechobee	2,919	0	0	0	0	0	0
Orange	86,782	29	43	36	27	106	41
Osceola	10,562	4	8	3	5	16	50
Palm Beach	112,311	6	3	4	6	13	4
Pasco	13,729	4	5	9	7	21	54
Pinellas	130,268	57	41	34	25	100	26
Polk	112,429	64	25	34	53	112	33
Putnam	17,837	2	7	4	17	28	55
St. Johns	21,596	3	20	21	15	56	87
St. Lucie	12,958	1	2	1	0	3	8
Santa Rosa	16,986	9	6	8	4	18	35
Sarasota	19,202	11	24	20	9	53	92
Seminole	24,560	7	9	7	2	18	25
Sumter	10,417	1	8	2	2	12	38
Suwannee	17,602	3	11	11	6	28	53
Taylor	10,738	10	14	12	5	31	96
Union	6,051	1	1	1	1	3	17
Volusia	58,492	47	23	27	20	70	40
Wakulla	5,059	0	0	0	0	0	0
Walton	13,871	17	23	16	7	46	110
Washington	11,889	5	8	10	10	28	78
Totals	2,250,061	1146	1234	1045	793	3072	
Per cent of Total		37	40	34	26	100	45

¹ Dade less Miami and suburbs

² Miami and suburbs

⁵ Hillsboro less Tampa

³ Duval less Jacksonville

⁴ Escambia less Pensacola

Then, too, we've been able to learn which age and sex and color is most frequently effected and several unexpected results are encountered. We have just stated above that most of our cases of typhus are acquired in the home and yet the age 0-9 in which we probably spend as much if not more time at home than in other periods of our life is found to contain the least number of cases. It is quite obvious that age does not confer immunity so that other explanations must be sought. It has been observed that as persons grow older that the disease is much more severe and most deaths from typhus fever are in persons over 50 years of age. It is also well known that children are frequently the victim of fevers and sickness which come and are gone before a proper diagnosis can be made. These two facts suggest the possibility that typhus fever in younger children is such a mild infection that this very serious disease is not even suspected and as a result goes unrecognized. It is also probable that the reported attack rate is higher in older persons because the disease is more serious and more frequently diagnosed. These are some products of the survey which raise questions, the answer of which must be sought in further work.

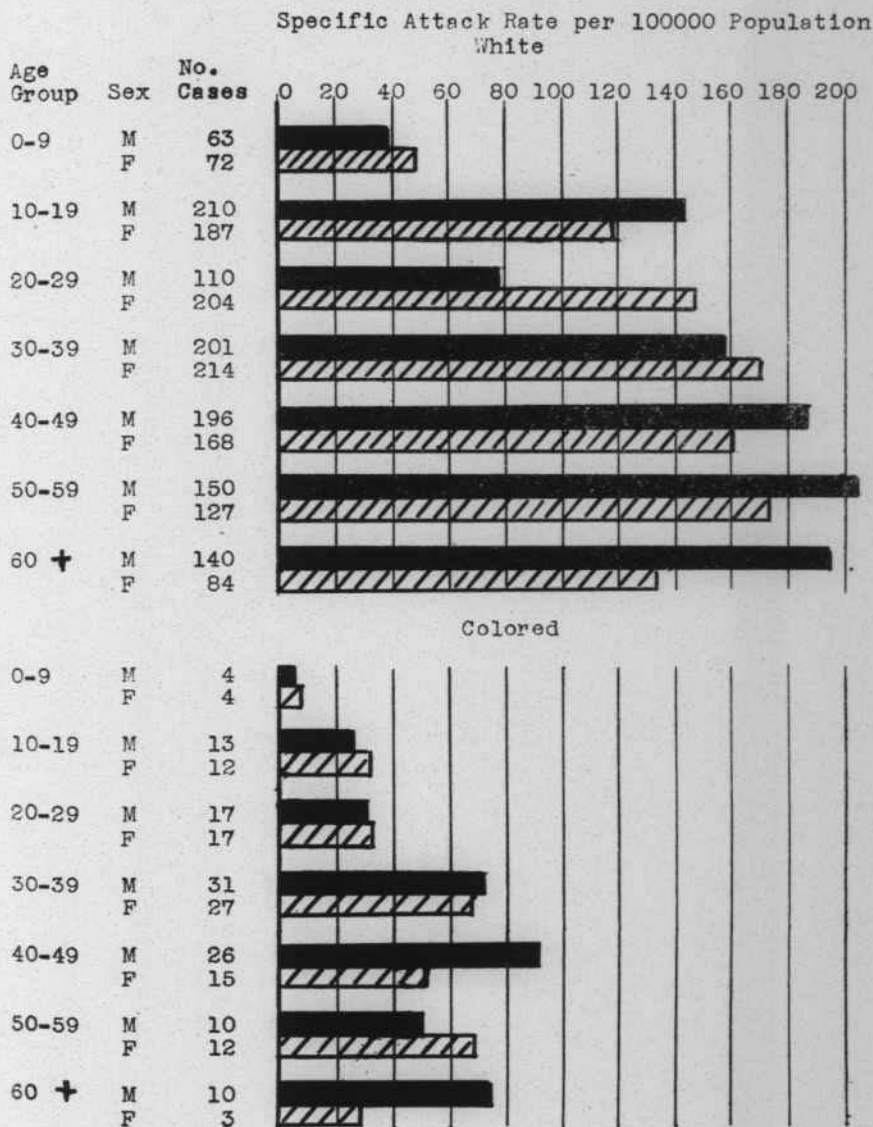
Then again there is the matter of the differences between the white and Negro races. We have previously stated that where there are more rats, there we would expect to find the most typhus fever. We expect to find more cases among colored because the majority of their dwelling places and business places are most favorable for the presence of rats. In the survey great pains were taken to learn of as many cases as possible, both white and colored, so it is felt that the opportunity for reporting were about equal. As far as we know, fleas will bite white or colored indiscriminately, so that the chances of contact should be the same, and yet we find fewer cases among the colored.

We find this color difference in some other diseases such as hookworm in which it is felt that the skin of the Negro is such that the worm which must pass through the skin is hindered in some way, a condition which is not met with in the white skin. Again in poliomyelitis, there are fewer colored cases and we feel that this is because colored cases do not as frequently come to the attention of physicians and hospitals who would report them.

Chart III

Comparative Age, Race and Sex Specific Attack Rates
per 100000 Population.

(Based on 2327 cases occurring in 1944, 45, and 46.)



We have also learned when most cases of the disease occur during the year. Most cases are reported during the month of June. There is also a secondary peak in October. The reason for this latter peak is not known at the present time and can be solved only by further work.

As can be seen from the total survey figures previously given, there were fewer cases of typhus in 1946 than in 1944. This poses another question. It is known that almost all diseases have cycles of increased occurrence, some of which can be predicted, such as measles, and others which occur in an unpredictable manner, like influenza. Typhus fever probably also occurs in cycles so that the present year is a low year in the cycle of the disease. We also know that there is a gradual decline in the occurrence of diseases after they have once been well recognized and measures to combat them taken, as in the case of diphtheria and typhoid fever, the present decline in typhus fever may also be a manifestation of this tendency.

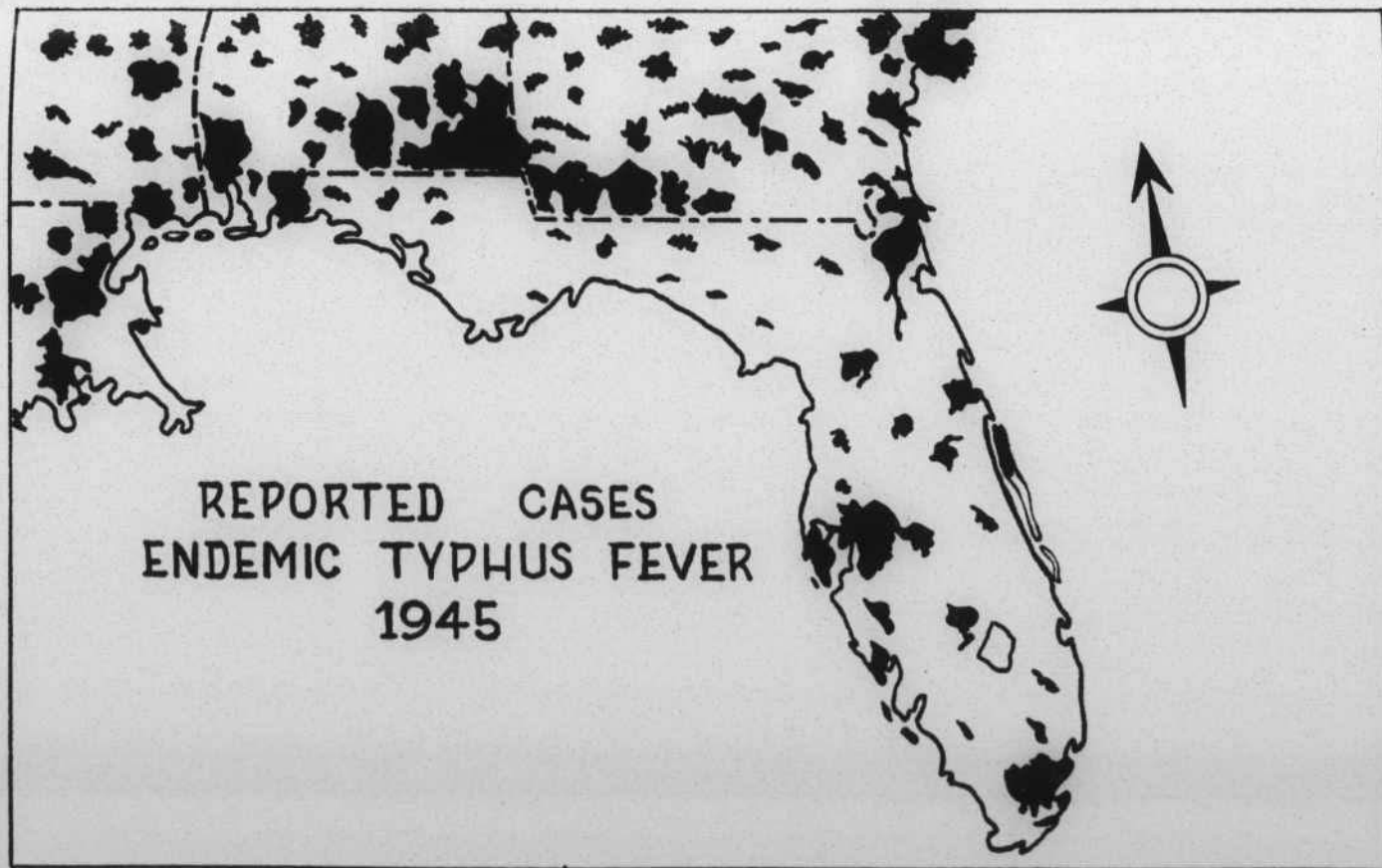
★ PLANNING CONTROL

In planning programs for the control or eradication of typhus fever, knowledge not only as to the case incidence but as to the circumstances under which the disease is acquired is highly desirable if not indispensable. Without such knowledge the proper orientation of control measures and subsequent evaluation of results achieved must be difficult if not impossible. There would seem to be little question that the rat-proofing of buildings is the ideal method of rat and typhus fever control. In many respects this method is comparable to permanent drainage measures in malaria control. Like permanent drainage rat-proofing

has structural and economic limitations and, so far, has been applied principally to urban business establishments. The results of the present survey have shown, however, that urban business establishments are responsible for only one-fourth of the cases of typhus fever in the state. Evidence has indicated that 66 per cent of the infections are contracted in homes and in homes of the poor or poorest types in which rat-proofing would be least feasible both from the economic and structural standpoint.

In many cities in the United States DDT dust has been applied to rat infested dwellings and buildings particularly in the poorer residential districts in an attempt to control typhus fever by the reduction of fleas or rats. Encouraging reports have appeared both upon the reduction of the number of fleas on each rat and the reduction of human cases of typhus fever by this method. These results are apparently being confirmed by many independent workers. So far, however, little has been reported upon the necessary frequency of application of dustings and the duration of its effect in order that the economic practicability of the method over a long period of time may be evaluated.

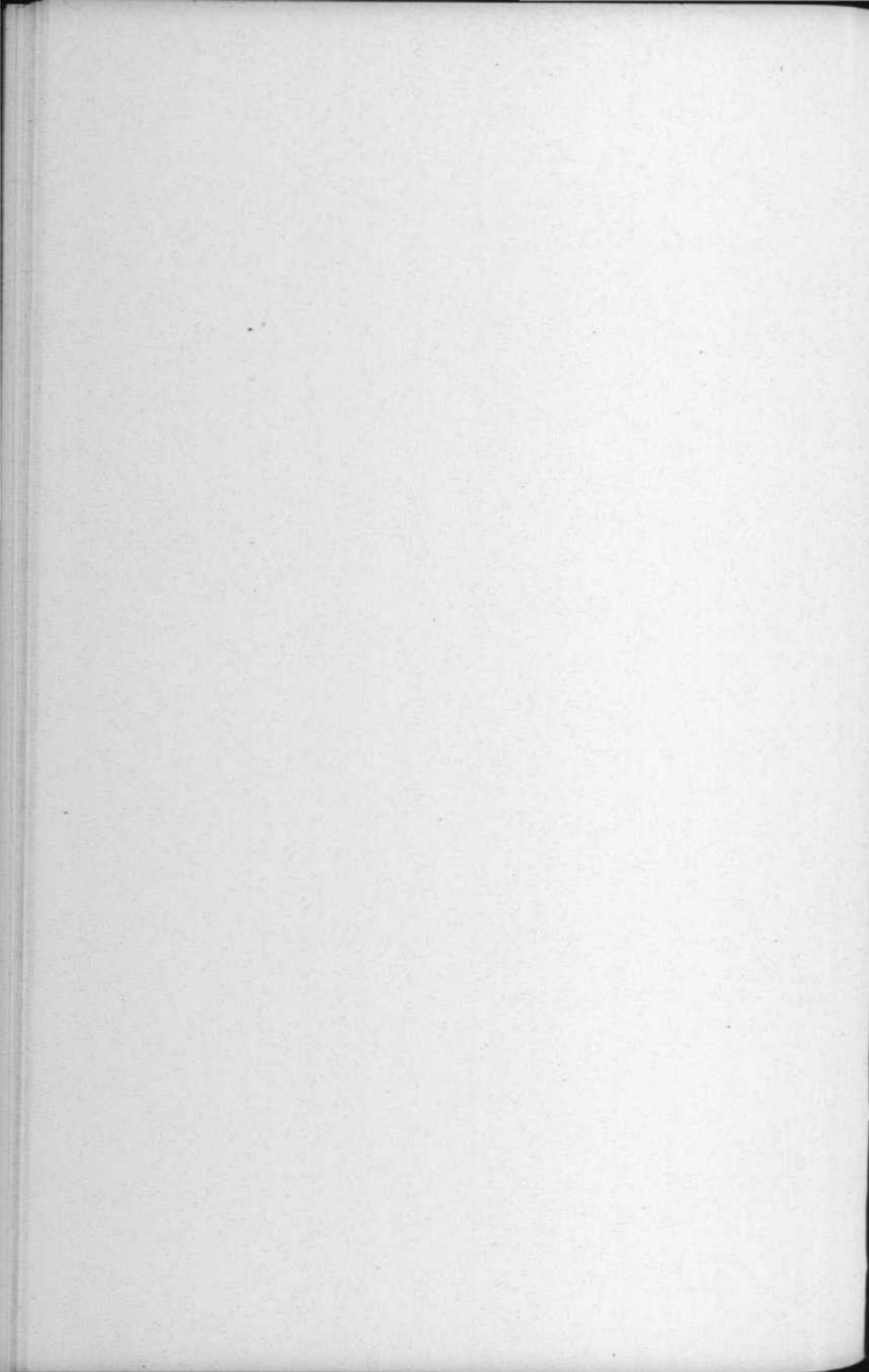
The problem of the control of rural typhus would appear to be the most difficult of all for solution because of the cost due to the long distances involved. Fortunately, the Florida population is essentially urban, therefore, only one-fourth of the cases were found to be of rural origin. Sporadic cases scattered in small towns and cities throughout the state may be considered the same as rural cases, however, from the standpoint of the application of control measures. The relative numbers and locations of these cases may be appreciated by an inspection of Map I. Due to the cost of the control of rural and sporadic typhus by environmental sanitation, thought naturally turns to some cheaper alternative method. As yet no effective method of personal immunization against murine typhus fever has been demonstrated. The limitations of personal immunization as compared to sanitation as generalized public health measures are recognized. Typhoid fever is best controlled by sanitation but outbreaks are frequently avoided or aborted by immunization in localities where proper sanitation has temporarily broken down or may not feasibly be applied. It is believed, therefore, that search should be continued for an effective vaccine against murine typhus fever which may be used as an adjunct to programs of environmental sanitation.



Education of the public in the cause and prevention of murine typhus fever has been used in several states in varying degrees as a method to control the disease. Although tangible results obtained by this method are difficult, if not impossible to evaluate, the cost is generally relatively small. Moreover, the effectiveness of education generally is proportional to the degree of rat infestation and risk of typhus fever infection in any given community. The worker in typhus fever control is aided greatly in gaining public support by the large economic loss yearly inflicted by rats.



Here we show an important step in a typhus fever control program. Does the rat have the typhus germ in his blood? If so, the fleas that have lived in his coat and from his blood are carriers of the disease. Before dusting is begun in a section a large number of rats are trapped, chloroformed and then, as in the picture above, a sample of blood is taken to find whether or not the rodents are infected. Next, they are combed to ascertain the number of fleas on them. Later, after the dusting work has progressed, rats are trapped at monthly intervals and the test is repeated. The number of fleas the individual rat carries is an important barometer to the effectiveness of the dusting program. It also reveals the current percentage of rats with positive blood in the dusted area. (Photo by RSA)



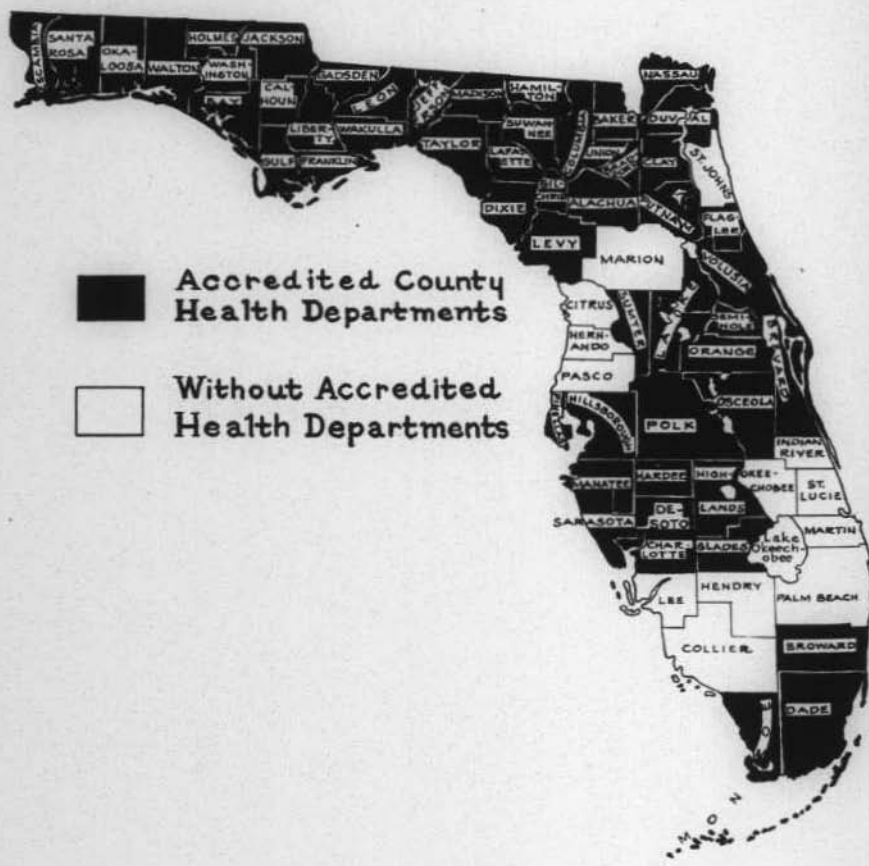
**NUMBER OF CASES OF SPECIFIED DISEASES BY COUNTIES
FOR THE MONTH OF JULY.
(June 28th—July 26th)**

County	Estimated Population	Cancer	Diphtheria	Dysentery-Ameb.	Meningitis-Epi.	Pollomyelitis	Scarlet Fever	Syphilis	Tetanus	Tuberculosis-Pul.	Typhoid Fever	Typhus Fever	Undulant Fever	Whooping Cough
Total for Year		534	132	32	42	50	228	10746	15	2617	32	109	35	1400
Total for Month		89	9	3	3	5	9	1018	2	448	4	12	9	175
Alachua	38,245				1			11		5			1	
Baker	6,326							1		1				
Bay	53,200	2		2				27		8				6
Bradford	11,600							5		1				
Brevard	20,750							6						
Broward	55,100	2					1	41		3	1			9
Calhoun	8,230													
Charlotte	4,470							2		1				
Citrus	5,427									3				
Clay	11,600													
Collier	4,957													
Columbia	17,250							6		3				
Dade	336,300	52		1		1		139		79	1	1		94
DeSoto	6,854							8		3				
Dixie	4,925									1				
Duval	302,200		2					119		19		3	2	1
Escambia	118,900							34		6		1	1	15
Flagler	2,652							12						
Franklin	8,900							4						
Gadsden	31,041							30	1	85				
Gilchrist	3,466							1						
Glades	2,281							1						
Gulf	7,040							6						
Hamilton	8,731													
Hardee	8,885							1						
Hendry	5,066													
Hernando	5,700													
Highlands	19,300							11		4				2
Hillsboro	220,100	24	2		1		5	74		36	2	1	2	15
Holmes	14,627							1		1		1		
Indian River	9,130							7		1				
Jackson	34,550							4						
Jefferson	11,066							3		2				
Lafayette	3,995							1		1				
Lake	28,300				1			29		7				
Lee	26,300							14		1				
Leon	37,100							49						
Levy	9,902					1		3		8				1
Liberty	3,193													
Madison	15,537							5		12				
Manatee	27,100							6						
Marion	36,900							9		4				
Martin	6,094									13				
Monroe	21,200													
Nassau	10,900									3				
Okaloosa	17,653									3				
Okeechobee	2,919							2						
Orange	94,200	2					1	39		10				26
Osceola	10,800							8		9				1
Palm Beach	126,700	1				2		48		4				
Pasco	13,729							4		4				
Pinellas	147,300						1	41		28		1		1
Polk	123,800		2			1	1	26		19		1	1	1
Putnam	17,837							1		2				
St. Johns	22,300	1						3		5				
St. Lucie	13,400							17		2				
Santa Rosa	17,400									11			1	
Sarasota	20,600	1						3		4			1	
Seminole	25,600		1					23		20		2		
Sumter	10,417		1					6						
Suwannee	17,800							76		1				
Taylor	10,738													
Union	6,051							14		1				
Volusia	61,600	4	1					36		7				3
Wakulla	5,059							2						
Walton	13,871								1	1				
Washington	11,889							4		2				

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STATE OF FLORIDA





Florida **HEALTH NOTES**

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Stream Pollution

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Florida **HEALTH NOTES**

ESTABLISHED 1890

STREAM POLLUTION—A STATE AND NATIONAL PLAGUE

With the growth of any state and nation—with their increases of population and industry, the use of water becomes a greater necessity, and the pollution of our streams will increase because of the wastes caused by such progress.

Today, stream pollution has become a health, economic and welfare hazard. Our public drinking water supplies are becoming more grossly polluted, our recreation facilities are being diminished and our shellfish-growing areas are being eliminated.

Your State Board of Health is embarking upon a stream pollution abatement program, which, although limited, is to the fullest extent of our present resources. We believe that a good beginning, regardless of how minimal, is important and should not be delayed.

You will note in the following article the problems that confront us today and the help that is needed to achieve our purpose... Everyone is requested to co-operate in helping to return our streams to a condition that they may be of use to the general welfare of all the people.

DAVID B. LEE,
Chief Sanitary Engineer



A Sanitary Officer in one of the County Health Departments in the state, points to "virtually raw sewage" flowing from an outfall sewer which empties into a small bayou in the center of a Florida city. Bayou is considered "grossly polluted." However, on the credit side for this growing little city, we show on the opposite page, a modern sewage disposal plant located in and serving another section of the city. This plant was constructed during the war with the help of the Federal government. According to State Board of Health engineers, "This plant efficiently treats all the sewage from the section sufficiently to enable the sewage to be placed in the bay waters without the creation of pollution hazards." (Photo by RSA).

STREAM POLLUTION

By: **DAVID B. LEE,**
Chief Sanitary Engineer, and

JOHN C. PATTERSON,
Sanitary Engineer

Forty years ago the late President Theodore Roosevelt declared to the first conference of governors that, "America, for a century, has managed to mismanage all of its river systems."

Great amounts of money, energy and time have been spent since then; much discussion has been heard and action seen; yet the accuracy of the statement cannot be challenged. It can certainly apply, with few reservations, to the problem of stream pollution and its abatement as it confronts the country today.



What Is Stream Pollution?

Pollution is the result of water, which has been used for domestic and industrial purposes, being channeled into an uncontaminated stream, thereby polluting and reducing its usefulness. Unless the condition is checked it obviously increases with population and industrial growths. The importance of abating pollution is therefore apparent for it cannot be permitted to strangle further development nor to stifle the welfare of the people.

Pollution or purity are only relative terms. The purest waters in nature are those of the newly precipitated vapors of the upper atmosphere. Even these contain dissolved atmospheric gases, for during their passage to the earth's surface they gather other impurities—floating dust, the solid and gaseous debris of combustion, bacterial life and the spores of fungi.

Every state has some type of pollution abatement law. The statutes of Florida, for instance, make it unlawful for any rubbish, filth, poisonous or noxious substances likely to affect the health of persons, fish or livestock, to be placed in or deposited where it may be washed or otherwise admitted into any of the waters of the State.

What Causes Pollution?

This question is another one of a nebulous nature, but it may be approached by stating that, any organic or inorganic residue which may be of a detrimental nature, and that enters into the various types of waters, might be classified as pollution. This subject of "detrimental nature" is again relative, and in stream pollution programs, individual circumstances must dictate the cause, the policy, and the program of abatement.



In another Florida city, in the midst of a residential section (note house in background), we show an outfall sewer which takes care of overflow from a pumping station. Sewage was "absolutely raw" to the extent that solids could be raked from the water. Condition exists whenever pumping station is not operating. Overflow drains into a bayou a few yards beyond picture. (Photo by RSA).

What is the Attitude of the People Toward Stream Pollution and its Abatement?

The average person is conscious of tangible irritants. And those things which are not too obvious often lose much of their significance. However, one is certain that those which **offend the sense** are harmful. Particularly are those which affect the eyes and nose upsetting. A stockyard, a chicken killing establishment, a pile of ashes and scrap all may become health hazards or sanitary nuisances. And, one should expect concern over offensive odors, or rats scampering over a refuse dump if not from an ash and scrap heap. However, it is extremely difficult for the average citizen to fully appreciate the various health, economic and welfare hazards of **stream** pollution. **The contributing conditions are not as accessible or as easily smelled or seen.**

Yet the promotion of popular support for water and public sewerage works must be based on existing or demonstrable potential danger to health and welfare as well as upon possible economic loss. If the potential is great enough it is fairly easy to get all the support necessary to develop a complete program. But if the problem is that of **AVOIDING** possible danger, then it usually, and unfortunately becomes necessary to paint the pictures in colors lurid enough to catch the imagination.

Pollution problems too frequently are looked upon from a purely selfish viewpoint with little regard for the welfare of the people as a whole. This is like looking through the wrong end of a telescope. Unless the senses are disturbed, they are often intangible and communities nor individuals rise to combat something vague which can be "put off until tomorrow." In the meantime both **municipalities** and **industry** move closer and closer to the complete contamination of our greatest natural resource.

What is the Need for Stream Pollution Abatement?

The greatest need for stream pollution abatement stems from the importance of surface water for domestic supply.

Stream pollution control is one of the most important items in the water supply industry. America's supply of pure water

is its most vital national resource. Approximately three-quarters of our communities, tens of millions of people, use drinking water originating in surface streams. **In Florida, however, the situation is a little different because approximately ninety per cent of our two and one-quarter million people use ground (well) water for domestic consumption.** There is reason to believe, however, that more cities will turn to surface sources (lakes and rivers) in the near future. Over twenty-five years ago, F. H. Newell, former Director of the U. S. Reclamation Service, listed the various uses of water in the order of their importance, as follows:

1. Human consumption (drinking and cooking);
2. Production of food (watering stock, irrigation, fish and shellfish production);
3. Disposal of wastes;
4. Industry (water power, steam power, and industrial processes);
5. Transportation (navigation).

To those we would add a 6th: Recreation (boating, bathing, camping and sport fishing).

It should be observed that the relative order of importance is subject to variation in the light of local conditions. We in Florida, with our traditional emphasis on recreation, would certainly classify recreation and recreational facilities in about the third category.

Drinking water is one of the necessities of life. It is second only to air as an essential commodity to human life.

The need of stream pollution abatement in Florida is of vital importance to our public water supply systems. **Less than one-half of our citizens have domestic water available that has been treated in any way.** Consequently, over a million Floridians consume untreated ground water.

Why mention these data in a stream pollution discussion? Because the major portion of Florida's domestic water is obtained from limestone formations known as the Ocala formation. Ocala limestone is soft, porous, friable and probably does not exceed 500 feet in thickness. And, contrary to popular opinion, underground rock formations are not solid. Water moving in lime-



In the extreme right hand corner, a sewer outfall empties raw sewage into a city bay, four blocks from center of business district. (Close up is shown on next page). Building in background is the town's city hall. This is one of four such outfalls dumping into the bay within a space of four blocks along the waterfront. (Photo by RSA).

stone usually makes its way along crevices which, when enlarged, are known as caverns. Because of the present voluminous open cracks or by virtue of the natural solubility of the rock, very large open chambers called domes are formed where surface waters enter the rock. As solution progresses parts of the cavern or dome structure become weakened and collapse to form local depressions commonly referred to as **sink holes**.

At present many of these sink holes and **drainage wells sunk for that specific purpose**, are being used in Florida for the disposal of storm and surface drainage, industrial wastes and most serious of all, for **domestic sewage**. Much of this waste merges, sooner or later, with drinking-supply-water. Therefore, the popular concept that all ground waters are safe to drink without treatment should be dispelled from the public mind. In fact, the situation in Florida has reached such an alarming condition that ground water has to be given the same treatment as surface water as far as sanitary quality is concerned.



Problems in Florida

Examining the municipal scene, we find that nearly every community of any size in Florida has failed to provide itself with adequate facilities for disposal of domestic sewage or garbage and rubbish. In many cases storm sewerage is conspicuous by its absence.

For instance, in 1945 there were 223 such places in the State with populations of more than 2,500 people . . . or a total of 1,279,960 individuals. Records show that only approximately 732,000 Floridans reside in areas served by public sewerage, and of those only about one-third are connected to some type of treatment works. In other words, only about 12 per cent of the State's urban resident population is connected to modern sewage treatment facilities, or that only **eight** per cent of the state's total population is connected to any treatment facilities.

The question now arises about the industrial portion of this ugly panorama. Ten years ago the comment could be heard frequently that industry in Florida was discharging almost all of its liquid wastes as untreated material, but that its relative volume was insignificant when compared to the volume of raw or inadequately treated domestic sewage discharged by communities into the waters of the State.

This Statement Does Not Hold Today

Not only has the industrial waste problem tremendously increased in itself but its type and characteristics are more varied. A conception of the growth of one of Florida's major industries may be obtained from marketing reports of the citrus processing industry. These reports reveal that canning production increased from **10,000 cases in 1921-1922 to 48,845,000 cases, based on 24 No. 2 cans per case, 1945-1946**, a phenomenal multiplication of over 4,800 times.

Let it be assumed that the citrus canning waste volume approximates 50 gallons per case of No. 2 cans. This unit volume was obtained by averaging actual measurements at several typical installations. It has been estimated that the volume of liquid waste produced by citrus fruit canners approaches the staggering total of **2,400 million gallons (2,400,000,000) per year.**

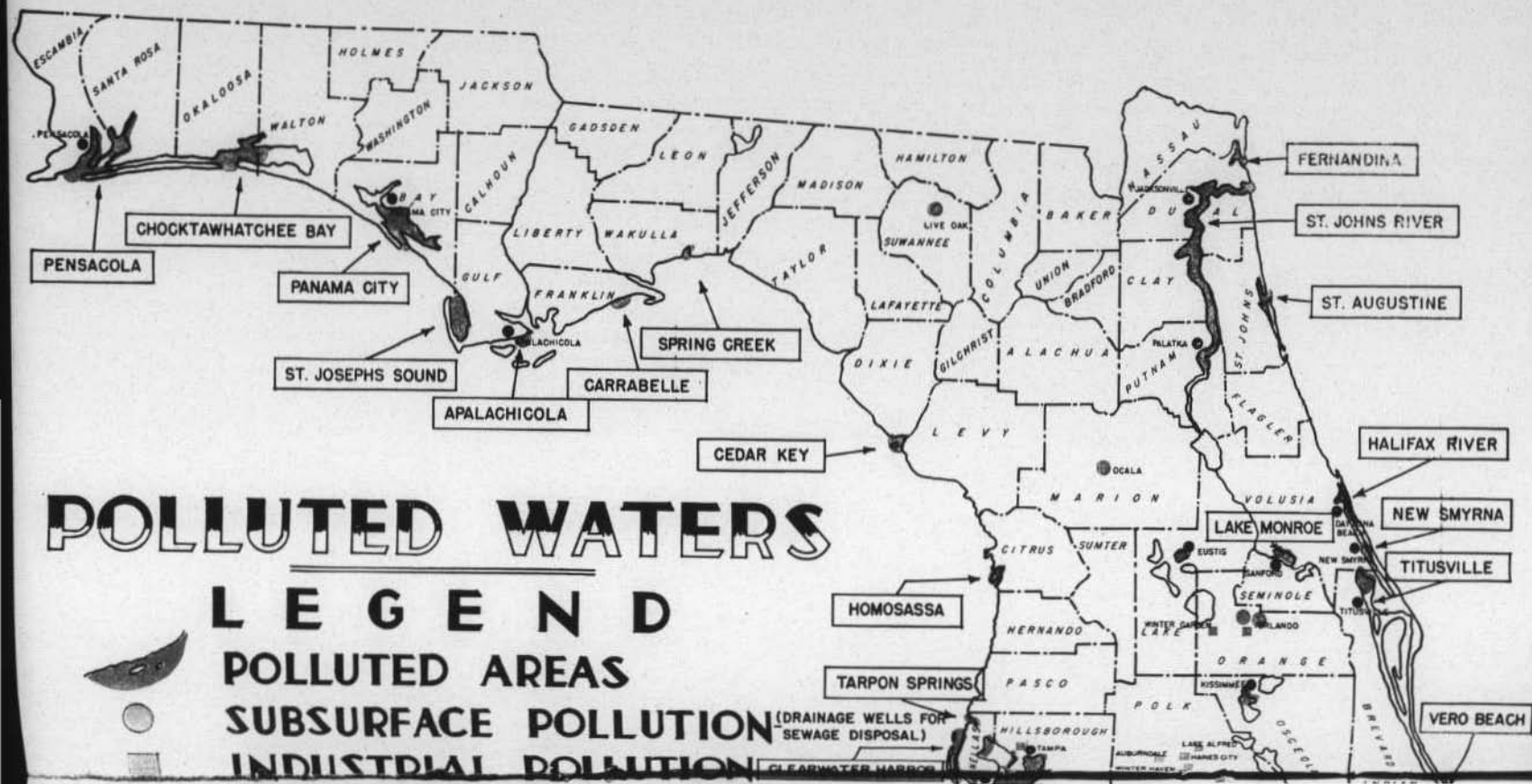
The State Chamber of Commerce reports that approximately **525 new industries** have located in Florida since May 1944; and in 1940 the value of products manufactured in Florida reached \$241,000,000. Much of this industrial growth resulted in the discharge of ever-growing volumes of wastes into the surface and underground waters in the State.

As a direct result of the daily discharge of millions of gallons of raw or inadequately treated domestic sewage and trade wastes into natural bodies of water, 139,478 acres, or **232 square miles of commercial shellfish growing beds** have been condemned by the Bureau of Sanitary Engineering of the Florida State Board of Health. In many of these areas, shellfish are no longer to be found because of the pollution densities. Many other areas may be hazardous for the taking of shellfish but this fact has not been determined specifically by study.

The reader may judge the effect of the pollution of shellfish areas by considering the value of the industry to the economy of the State. The average yearly income of the crabmeat processing industry is \$700,000; the value of the oyster, scallop and clam harvest is in the order of \$1,000,000 per year. The industry has estimated that opening the condemned areas of Pensacola Bay alone would increase the harvest to something like **\$4,000,000 per year**.

Figures furnished by the State Chamber of Commerce, indicate that the tourist expenditure in the state is between \$650,000,000 to \$700,000,000 per year. It may be safely estimated that 50 per cent to 60 per cent of these funds are spent for recreation in some form or another. Yet there are thousands and thousands of acres of Florida waters so polluted as to render them unfit for swimming, safe boating, fishing and other recreational activities.

Aside from the esthetic and health aspects, it is generally recognized that proper reduction of pollution also has important economic features. Looking at the balance sheet from another viewpoint, who can estimate the dollar and cents value of the hazard to the **health of the citizens of the state**, and to the



CONTRIBUTORS

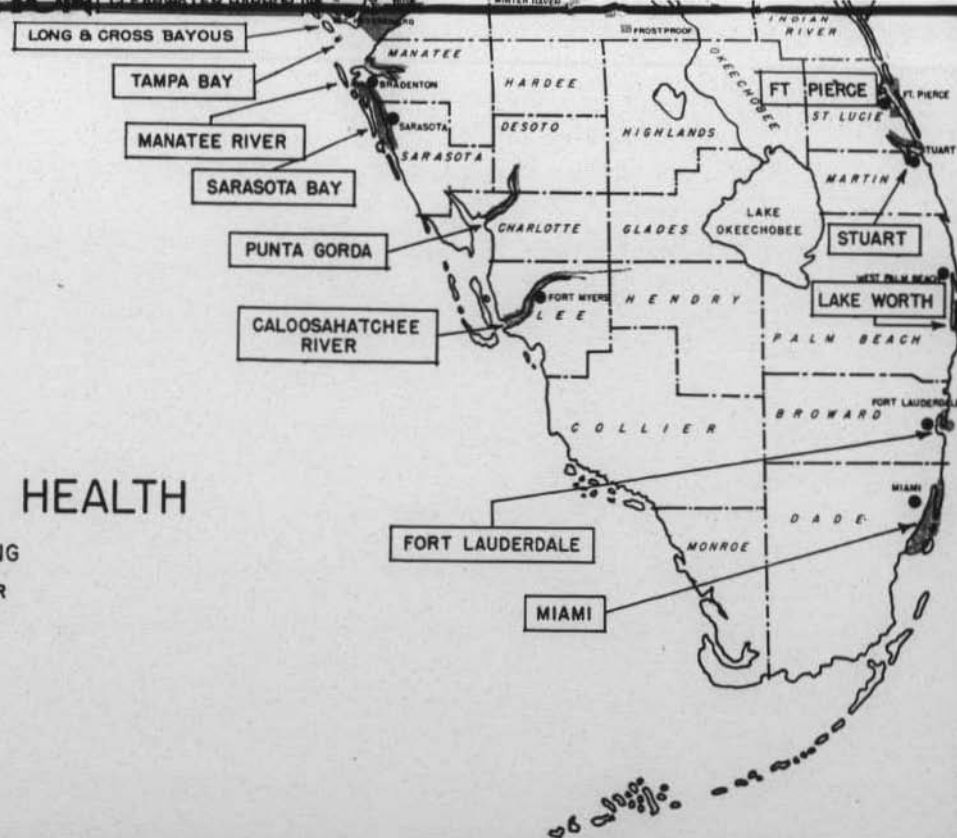
OTHER POLLUTION CONTRIBUTORS

NO OF SYSTEMS OR INSTALLATIONS	BOODY OF WATER ETC. RECEIVING EFFLUENT
18 —	BAYS, GULF & OCEAN
40 —	RIVERS
20 —	LAKES
45 —	SMALL STREAMS, CANALS, DITCHES & SURFACE DEPRESSIONS

FLORIDA STATE BOARD OF HEALTH

BUREAU OF SANITARY ENGINEERING

DAVID B. LEE—CHIEF SANITARY ENGINEER



visitors who arrive in Florida or in any other state in the Union, with the blind assurance that such conditions do not exist in this modern age?

Yet one minor epidemic of any of the filth-borne diseases could dissuade a tremendous number of visitors from coming to Florida for years; it would impede progress of industry; it would certainly retard the development of any community until such time as assurance could be given that conditions encouraging such disease had been corrected.

The Program of Stream Pollution Abatement in Florida

The abatement of stream pollution for Florida or any state has similar approaches. Any progressive program is developed in three phases, all of which are usually operating simultaneously in a given area:

1. Education and promotion,
2. Planning and executing, and
3. Operation and maintenance.

The first item is extremely important. Without crystallization of the necessity for proper waste disposal and applying its broad principles to the topic of discussion, it is impossible to proceed. **It is here that the health departments and regulatory agencies meet their most difficult problem.** Municipalities, individuals, companies and corporations do not realize the possible consequence of their present waste disposal practices. Overcoming this obstacle is the most important test before the state public health agency or the state regulatory agency today.

Factual data must be presented to the **offending** as well as to the **offended** parties. That is "**Define the Problem.**" In Florida more funds are needed for pollution surveys, educational and promotional work for an effective stream pollution abatement program.

Once the need for modern waste disposal facilities is demonstrated and public demand exerts its influence, a major forward step has been achieved. Project development then enters the second phase.



Here is a sewer outfall which serves a heavily overloaded primary treatment sewage plant. This strong sewage plant effluent is unchlorinated and is discharged to a stream subsequently used for drinking water. The mass on top of the broken tile and hanging on the undergrowth is sewage sludge. Plans are underway to remedy this hazardous condition, but many more such plants need studies necessary to get corrections in motion. (Photo by RSA).

Here the application of intelligent engineering and economic principles are most needed. Too often public interest will develop to the extent that citizens are willing to do only a part of the job. They must then be stimulated to consider the immediate proposition in the light of the ultimate good.

The third phase is last but not least. Once the physical facilities are obtained, the constant battle remains to secure the proper operation and maintenance. **Unfortunately the nature of waste disposal structures is such that they are located in remote sections of the community. It is natural that they should be neglected, human nature being what it is; things out of sight are very likely to be out of mind.** With an increasing number of tax procedures being reserved for higher governmental levels, municipal administrations are forced to economize or increase specific remaining taxes. The general public's approach to these matters being what it is, the axe falls heavily on the portion of the budget dealing with waste treatment.

Much of the foregoing discussion pertains to municipal problems. In general, the same approach is involved in a program of pollution abatement pertinent to industrial waste. In dealing with industry it has been found to be rather easy to **obtain cooperation when it can be shown that the industry can save money by process control or can recover valuable by-products from materials being wasted.** To get waste treatment for the sole purpose of pollution control is something else again. It is particularly difficult to convince established industry that national and state public opinion is demanding that industry realize its responsibility in this connection. Numbers of these establishments have discharged volumes of waste for many years without restrictions. Industry must face the fact that production costs must include the financing necessary to construct and operate such treatment works as are required to maintain our streams and tidal waters in a reasonably clean and sanitary condition.

This philosophy applies to both underground and surface waters. It is also a fact as intimated previously that **industry in Florida takes practices for granted which it could not presume to effect in many states where more progressive and anti-pollution programs have been operating for years.**



Here is a great stretch of soggy saturated ground at the foot of a sand hill used for filtration of industrial waste from a citrus plant. The waste is dumped into large pits nearly 300 yards away and seeps through the sandy soil, emerging at this and other low points in the form of a foul smelling, grass killing liquid. The entire area was covered with patches of "bubbled up" fermentation. Flies swarmed. This gives a graphic and odorous example of how far some types of sewage can seep through even good filter type soil and still come out polluted. (Photo by RSA).



This scene should rightly be presented in color because of the indescribable shade of pink water, bordered by a beautiful pastel green; all coming from a nearby tannery at the outskirts of a certain Florida city. Why the water is red is not known, but the green (in the foreground) is the shade of the processed hides. It covers a thick decomposing mass, fleshings and hair. Much of the material is carried by a drainage ditch to a natural waterway. Greater waste disposal problems of this kind are anticipated in Florida because more and more tanneries are being built in the State. (Photo by RSA).

Generations ago men located their industrial plants on rivers or streams for two important reasons: to utilize the water for hydraulic power and for processing purposes. Hydraulic power for individual plants is currently a less important factor but it is difficult to believe that the use of water for processing will ever have a substitute.

The states in which various industrial plants are located want to see industry prosper. Such prosperity is of importance to the investor, labor and consumers and to us all as beneficiaries of governmental services financed in part by taxes on business.



Here is a principal sewer outlet. Note the outdoor privy overhanging the basin bulkhead. Scene is within two blocks of the business district. (Photo by FPC, Fort Pierce).

Industry is often the "whipping boy" for pollution as well as for other conditions. However, the ingenuity of industrial men, their laborious planning and their willingness to take great risks, have brought about the enormous progress of civilization and have resulted in the production of all the necessities and luxuries of life which we now enjoy. If the industrialists have been required to first devise methods for disposal of their industrial wastes so that they would not adversely effect anyone, we would not now enjoy many of these products. But, in gaining all this, we have sacrificed some of our treasures and there are many scars remaining. The problem now is the healing of these scars and the protection of our remaining treasures.

What Viewpoint Should a State Take Toward Pollution Abatement?

Of course, a state should not attempt to attain the impossible, the impractical, or to entice the unsuspecting with grandiose promises of a Utopia. Rather it should be a strong cog well meshed with the other gears necessary to drive us forward to a more harmonious and enjoyable life through a better appreciation of the other fellow's problems. A state should base any program on an honest appraisal of the various elements and factors contributing to the general welfare and strive to bring these elements and interests into balance.

What are Some of the Interests, Elements and Factors Involved?

1. Few industries or municipalities are ideally located with respect to waste treatment and disposal. These adverse conditions must be recognized.
2. Usually industries and heavily populated sections are not sufficiently scattered to permit Nature to perform her miracles of purification and stabilization.
3. The interests of an industry and a municipality are often opposed to each other and to other industries and municipalities.
4. The same body of water must often serve as the source of public and industrial water supply and waste for disposal of other communities.
5. The interests of the recreationists, sportsmen and wildlife conservationists conflict with the needs of industry, agriculture and municipalities.

In reconciling these conflicting interests, and in trying to balance the various factors and elements, a state must keep sight of certain paramount considerations. It must not injure industry since **industry is the life blood of our whole economic system and affects us all**. Agricultural interests must be preserved because we have not yet arrived at the point where "one a day" pills will sustain life. Most important of all are the creative needs of the human and animal population of the state. Obviously, water will have to be obtained from rivers and streams or

from the ground. Nowhere will the supply be adequate unless each water user considers or is compelled to consider the equally important interest of water supply, recreation, industry and agriculture.

A state can, with justification, undertake a program of pollution abatement as a supplement to the Common Law. The old law gives each riparian owner the right to receive the waters of a stream in substantially their original amount and condition, modified only by reasonable use of upstream owners. This approach has been inadequate. The only solution to the restoration of all our streams to their original condition would be to close up our industries and villages and turn the land back to the Indians. **A happy medium must be worked out between the unattainable extreme of pristine purity for every waterway and body of water and the unforgivable extreme of gross pollution.** Obviously, this cannot be accomplished through any standard procedure nor can it be attained by gazing into a crystal ball. It requires a carefully developed comprehensive plan based on the equities of all concerned.

The preparation of such a plan requires a thorough knowledge of the conditions throughout the state; a knowledge of the nature and the volumes of domestic and industrial wastes produced; a study of the flow and characteristics of the various bodies of water receiving the wastes; a determination of the nature and amount of wastes these waters can reasonably be expected to assimilate; a classification of all the streams according to their potential highest use, which, of course, must be based on an equitable adjustment of all the factors and interests involved; the establishment of standards in compliance with the classification.

The problem involved in a plan or program of such magnitude and complexity obviously is great. It is apparent that flexibility must be incorporated in the standards because of the variations in characteristics of receiving streams and in the nature and volumes of wastes produced in the drainage area. **The fact that no fool-proof waste treatment plant can be built requires a decision as to the factors of safety that should be incorporated.** One factor is axiomatic—the impracticability of waste treatment to fit the specific requirements for all subsequent users.

The carrying out of such a program calls for tact, skill ingenuity, patience, and a generous sense of fair play and sportsmanship.



The State Board of Health recently put into service the above mobile field laboratory to be used in stream pollution surveys. This facility will expedite the Bureau of Sanitary Engineering in obtaining specific data and factual information regarding both stream pollution and the efficiency of water and sewage plants. Shown inspecting the laboratory-on-wheels before its maiden journey is David B. Lee, Chief Sanitary Engineer and State Health Officer Dr. Wilson T. Sowder.

What is Seen on the Credit Side?

A recently completed survey of community sanitary facilities in Florida shows that an expenditure of approximately \$186,000,000 is required on the basis of present costs for communities of the State to provide themselves with modern public health utilities. Components of this total are \$120,000,000 for sewage collection and treatment; \$60,000,000 for water supply and treatment and distribution; and \$6,000,000 for garbage and rubbish collection and disposal.

To be realistic it should be noted that the foregoing figures represent an ideal situation which is rather improbable of attainment. Attention is invited, however, to the fact that the survey dealt only with the communities of which sanitary utility requirements were found to exclude those of industry or relative high-density population groups residing outside of corporate boundaries.

Florida cities have submitted to the Bureau of Sanitary Engineering plans for a small portion of these needed facilities in the last six years, including proposals for 28 sewage treatment works. During the calendar year of 1946 plans were received and approved by the Bureau for 34 sewerage projects whose aggregate estimated cost was more than \$11,000,000. Most of this planning was accomplished under the Federal Works Agency program of advance planning funds to communities for such works. Only a small number of these projects have culminated in construction. It is anticipated that plans will be submitted during the current year for work considerably in excess of the previous amount. However, if a sizable proportion of these approved projects are built during the next decade real progress will have been made toward adequately sewerage the urban population and abating the tremendous degree of pollution now existing.

Future Progress in the State of Florida

The need of educating the citizens of our State concerning these matters already has been mentioned. **Facts and more facts** are needed to incessantly emphasize the need for adequate waste disposal facilities. Such a program cannot be confined to generalities since **citizens** naturally and justifiably insist on having a **complete understanding** of a situation before agreeing to underwrite what may prove to be a costly sanitary convenience. To obtain specific data, the Bureau of Sanitary Engineering has recently acquired a mobile field laboratory. It is anticipated that the operation of this unit will enable the Bureau staff to obtain **factual information** regarding stream pollution and the efficiency of water and sewerage plants. In addition, with five regional engineers stationed in the field, it is planned that a continuous stream pollution investigation will be instituted in the immediate future with present personnel and facilities and an endeavor made to obtain a pollution picture of our coastal waters and as many of our inland waters as is practicable.

Outstanding in interest in industry is the appreciation by the State's phosphate ore mines and paper mill operators of their pollutional control responsibilities. The former have underwritten a research program involving the allocation of \$19,000 to study possible practical means of abating present pollution of the Peace and Alafia River basins. The value of the total quantity of Florida phosphate rock sold and used in 1945 was in excess of \$16,000,000. It is of interest to note that the research program which may at first seem to be costly amounts to slightly more than one-tenth of one per cent of the value of the industry's annual production.

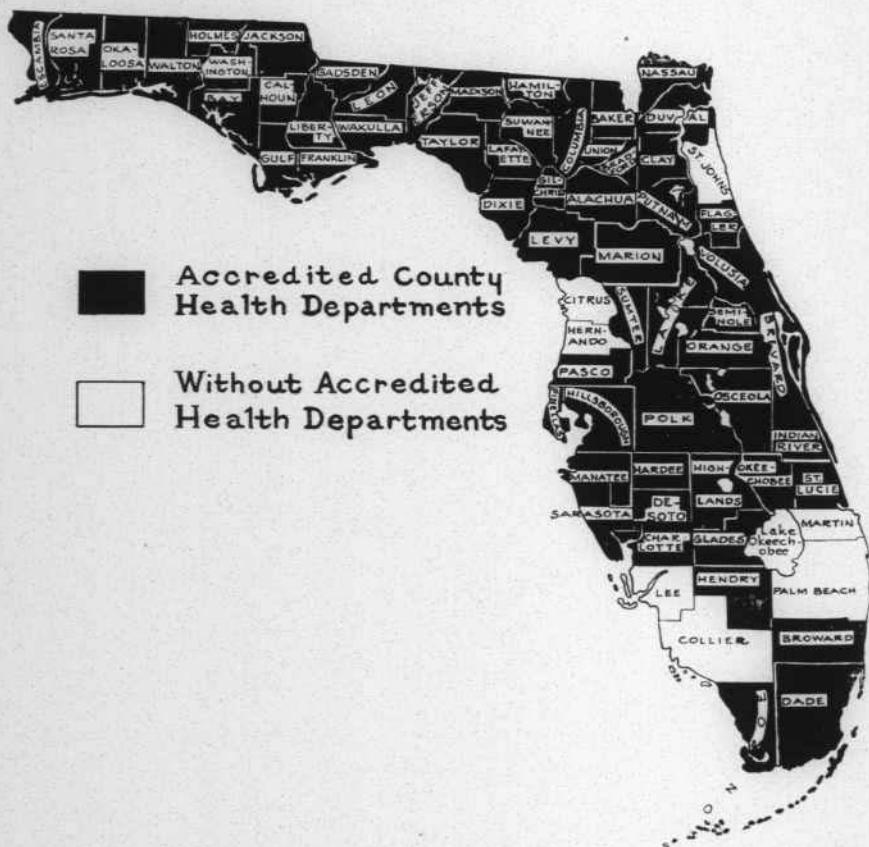
The country's pulp, paper and paperboard industries have fostered the organization and administration of the National Council for Stream Improvement. The Council is conducting extensive research programs at outstanding universities to develop adequate treatment methods for handling the various wastes produced by pulp and paper.

Some of the results will be directly applicable to Florida problems.

Stream pollution abatement is the conservation of our most essential natural resource. (Water). Water must be conserved for the health, economic and welfare of all the people. Governor Caldwell of Florida has successfully obtained legislation for a water conservation study of the state for the next two years. This is a step in the right direction.

Conservation of quantity and quality of water is a "MUST" in Florida in order to provide for further growth and development of our state.

STATE OF FLORIDA





**FRED B. RAGLAND, DIRECTOR
BUREAU OF FINANCE AND ACCOUNTS**

A native of Tennessee, Mr. Ragland is an alumnus of Georgia Tech, with graduate work at University of Georgia. Assumed present position early in 1946 after four years with the Army Air Forces, with rank of Major at time of termination. He is married, has two daughters, Gayle and Alice.

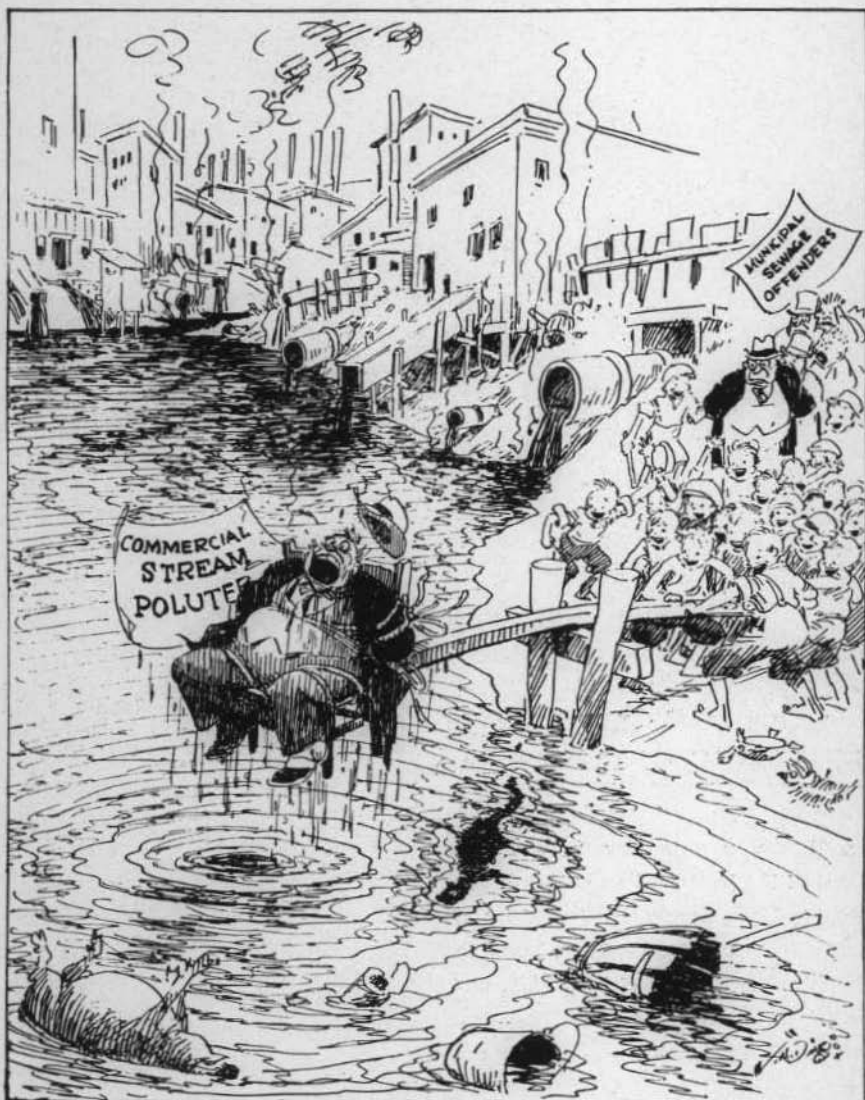
**DR. T. PAUL HANEY, DIRECTOR
BUREAU OF MATERNAL AND CHILD
HEALTH**

Dr. Haney, a newcomer to the State Board of Health served as county health officer in Jones County, Mississippi for 20 years. He is a native Floridian, however. He holds the degrees of B.D., M.D., and Dr.P.H., respectively from the Mississippi State College, University of Virginia and Johns Hopkins University.



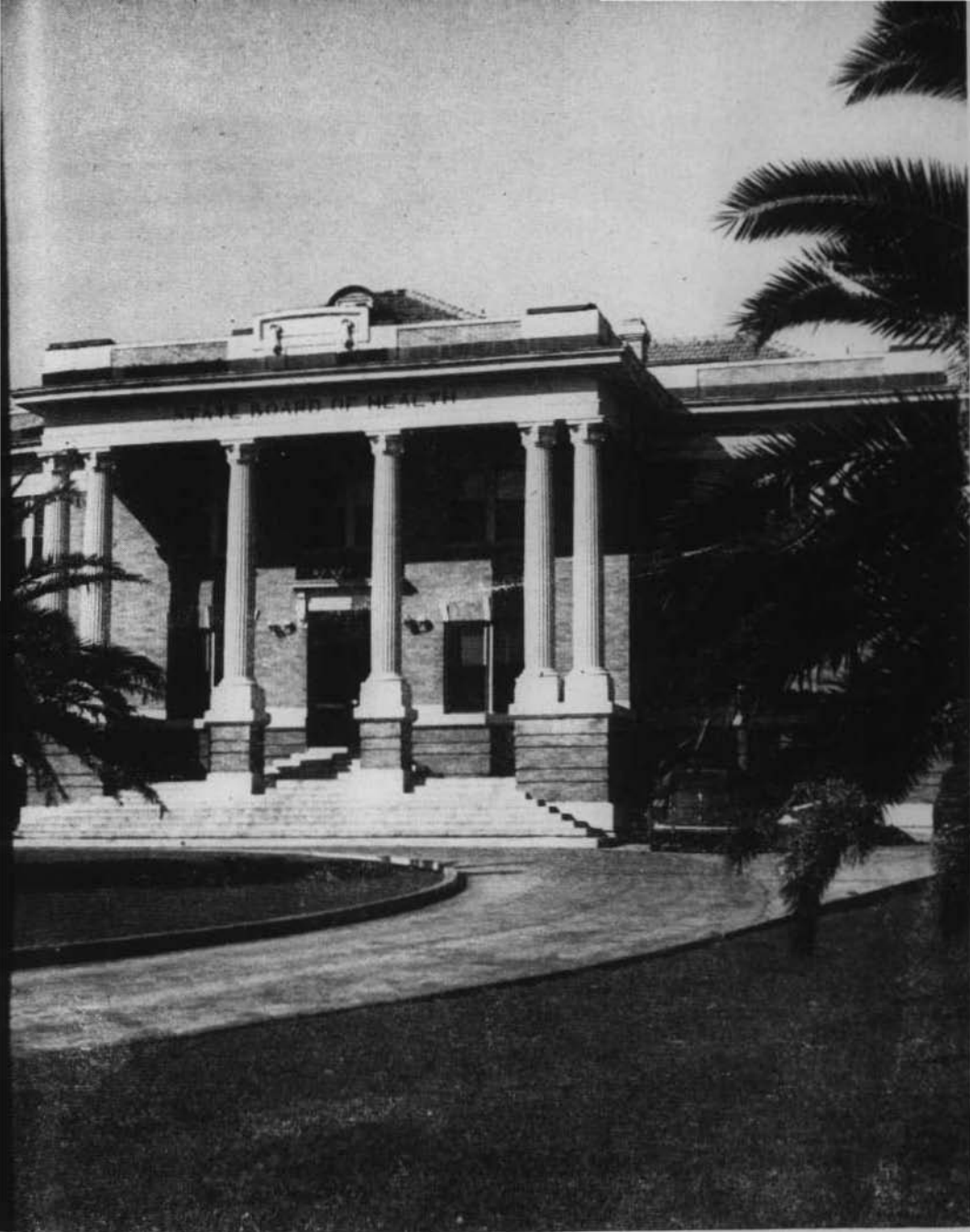
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Courtesy New York Herald-Tribune

*Why not put everything we don't want in the
waters of our state?*



Florida **HEALTH NOTES**

PUBLISHED BY THE FLORIDA STATE BOARD OF HEALTH
JACKSONVILLE - NOVEMBER, 1947 - VOL. 39 - No. 11

RABIES

The State Board of Health

Hon. Millard F. Caldwell
Governor of Florida

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Bureau of Tuberculosis Control
C. M. Sharp, M.D.

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Dade	Miami
De Soto	Arcadia
Dixie	Cross City
Duval	Jacksonville
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Glades	Moore Haven
Gulf	Port St. Joe
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Hendry	La Belle
Highlands	Sebring
Hillsborough	Tampa
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Liberty	Bristol
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Florida **HEALTH NOTES**

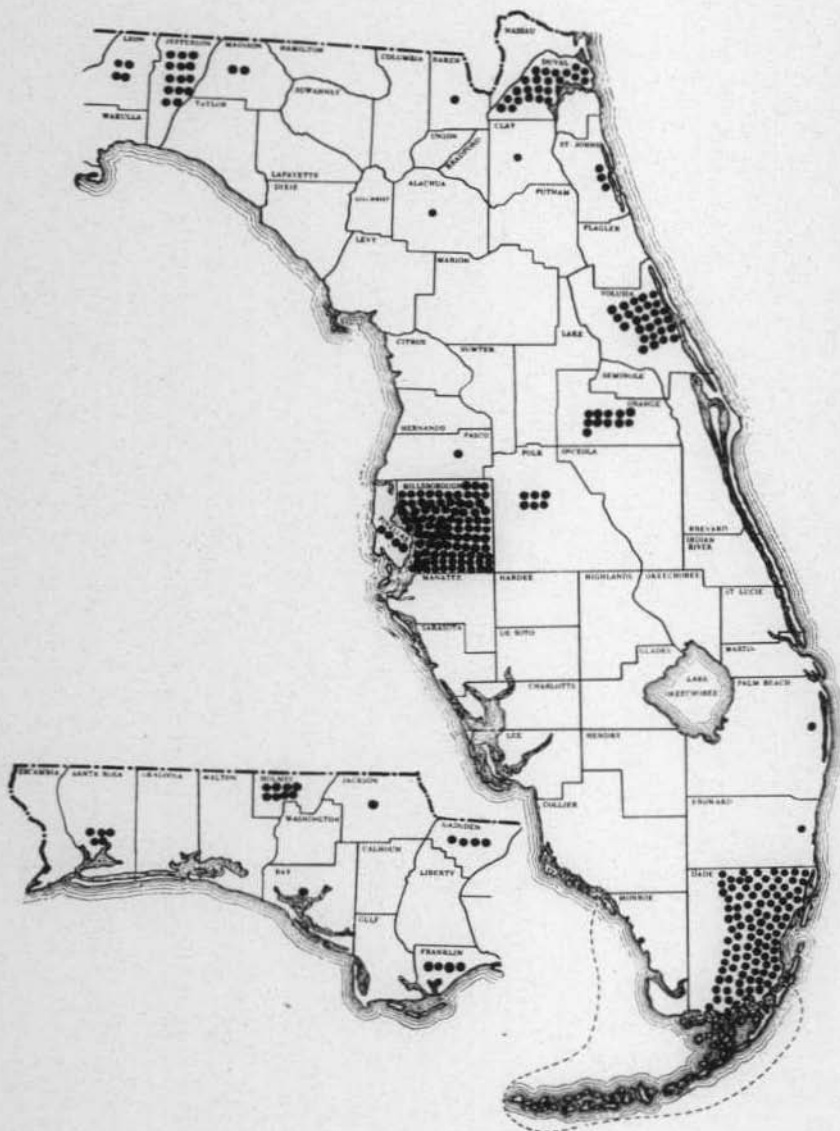
ESTABLISHED 1890

RABIES

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DISTRIBUTION OF ANIMAL RABIES IN FLORIDA

*First Nine Months 1947
(331 Cases)*



RABIES

Adapted from the report of
Dr. Edwin G. Riley,
former Epidemiologist, State Board of Health
Now Director,
Polk County Health Department

That rabies still abounds in the land and **that the prime** host of the disease continues uncontrolled in most sections is brought shockingly home when we study reports **that half** a million persons were bitten by dogs last year and at least 11,000 of those dogs were "mad."

The United States and certainly Florida, is justly proud of the many steps taken to improve the health of its citizens and to extend the normal life span. Yet rabies, a controllable killer, continues unabated to the point of being called a national disgrace.

Some people consistently deny there is such a condition. But one need only to read the case histories of the half dozen persons who have died from rabies in Florida during the past five years, to be struck with the terrible inevitability of the disease as it progresses from the first symptom to the certain death. These are histories which describe a needless horror for victims who remain alert and conscious until the very end of life. They are innocent victims. According to the Bureau of Animal Industry of the U. S. Department of Agriculture, "Rabies is an outstanding example of a dangerous disease which could be controlled, or eventually eradicated in this country, but which is not under control because of failure to impose and thoroughly carry out uniform regulations." The bureau emphasizes that "The prophylactic vaccination of animals is now a practical possibility."

Authorities declare that although only about 70 persons died from rabies in the United States last year, and "the problem deserves attention **far out of proportion** to what that number of deaths would ordinarily call for because of the peculiarly horrible death involved."

The U. S. Public Health Service reports the country has the highest rabies death rate in history and there has been a 50 per cent increase over pre-war figures. This is reflected in Florida. Animal heads diagnosed "positive" by the State Board of Health Laboratories have increased materially for the past five years. We must say, however, we do not have reliable figures on either human or animal rabies, but this condition is improving with the establishment of local health departments throughout the State. Sixty such departments are now functioning and will report all cases of rabies in their respective communities in the future.

We do have enough facts to realize we face as serious a situation here as in any state in the country. During the past six months outbreaks of animal rabies were reported in such widely scattered areas as Escambia and Santa Rosa counties in the west, Dade county in the southeast, Hillsborough in the southwest, and in St. Augustine on the northeast.

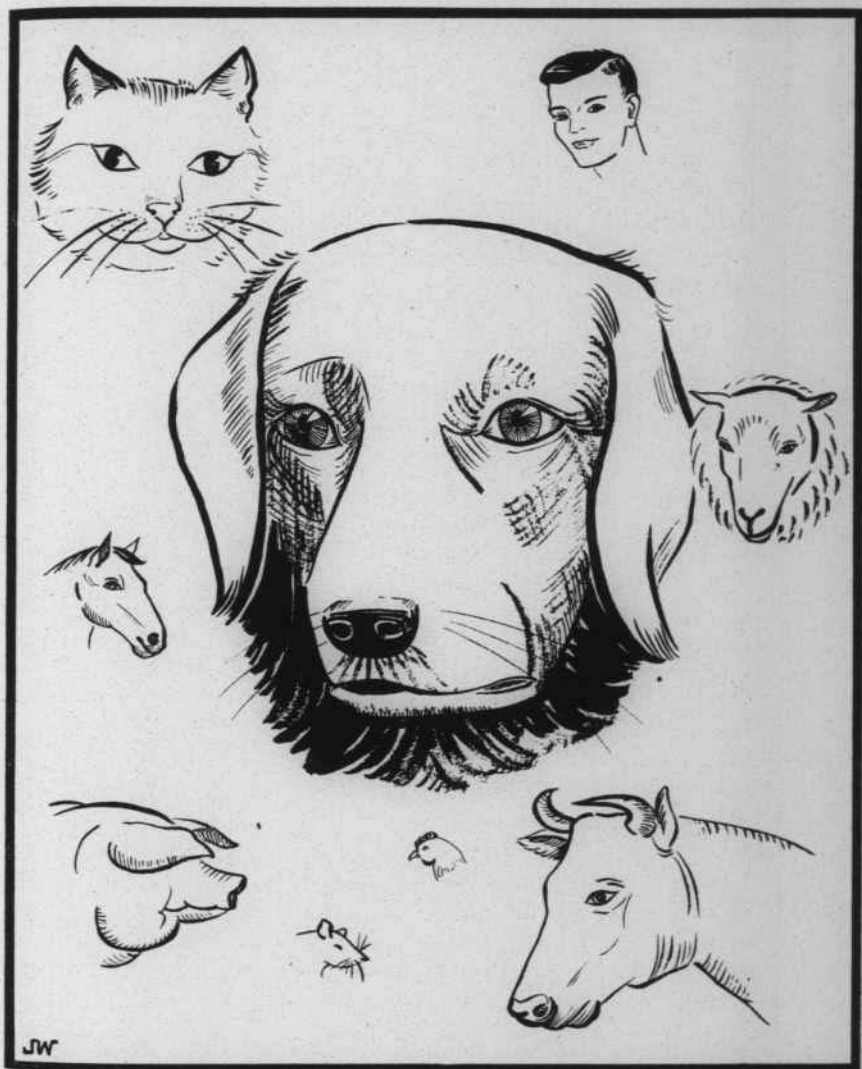
But it is an ill wind that blows no good. After these outbreaks, most of the sections involved report educational campaigns and even local legislation to prevent or curtail future outbreaks.

Specifically, Pensacola reports a new city ordinance making the vaccination of dogs compulsory if the animals are allowed to run at large. It is also mandatory that all stray dogs and those without vaccination tags will be picked up and cared for at the Humane Society's dog pound.

Dade county reports a concentrated educational campaign directed at the public in talks to civic and service groups, various governing boards, and through the press and over the radio. Within one week more than 7,000 dogs were vaccinated.

It is wisely recognized that public support and cooperation is all-important in the success of any measure to control stray dogs, which in turn is the main factor in the prevention of rabies.

Although "control" is mostly in connection with dogs, this is primarily because dogs are household animals and therefore have closer contact with humans than do most other domestic or wild animals. A wide range of animals however, are susceptible to rabies. Included are the mongoose, rat, cat, dog, fox, cattle and in fact, almost all of the warm blooded animals.



The above drawing is a reminder of the domestic animals, including man, that are susceptible to rabies. Note however, that the dog, the one animal closest to man, and especially to children, holds the spotlight in a group. Each head is drawn in proportion to the amount of rabies reported in that particular animal family. Note that the dog's head is twice the size of the cat's head. Authorities agree that the control of rabies lies in keeping stray dogs off the streets plus the annual vaccination of the family, or household dog. Although only 70 persons died from rabies in the United States last year, it is agreed that "the problem deserves attention far out of proportion to what that number of deaths would ordinarily call for because of the peculiar horrible death involved.

In recent years there has been a particularly serious problem developing among wild foxes. These animals infect one another and in turn attack cattle and other farm stock. New York and Georgia have had considerable rabies in the past few years from this source. In fact, this past year Florida has had 16 cases reported among foxes in Jefferson county alone. It is believed this outbreak is an extension of the condition in neighboring Georgia, and it may become necessary to take strong measures to exterminate foxes if there is further progress of the disease in Florida.

There is a prevalent idea that the so called summer "dog days" is the period during which rabies is most likely to occur. This is pure legend, because rabies most frequently occurs in late winter and spring when dogs seem more restless and are on the move. However, an outbreak of rabies can occur at any season of the year.

All the animals infected with rabies show almost the same symptoms. The incubation period is variable, depending upon the age of the animal and the distance between the site of the bite and the central nervous system. In general the first symptoms appear from 2 to 8 weeks after the bite. After the infection is established either "furious" or "dumb" rabies may be shown.

At the beginning of the furious type the animal shows a change in behavior; either a tendency to sulk or toward greater affection. Gradually the animal becomes irritable and excited and during this time it will snap and bite at non-existent objects. Breathing becomes labored, the appetite fails, there is inequality in the size of the pupils of the eyes, and a weakness of the vocal cords, leading to a hoarse howl-like bark, followed by baying barks in a lower pitch. As the disease progresses the animal becomes vicious and violent. If caged, every effort to escape will be made. If free, the animal wanders far from home, attacking any living thing that crosses its path. The animal has increasing difficulty swallowing food and water and, therefore, avoids eating and drinking. Salivation is due to the difficulty in swallowing. Paralysis progresses rapidly and the animal usually dies 4 to 7 days after the beginning of the symptoms. Death may occur during a convulsive seizure or in coma, and the furious form always progresses to the dumb type if the animal lives long enough.

Dumb rabies is characterized by drowsiness, melancholia and a paralysis of the lower jaw, tongue, larynx and pharynx. The animal tends to run away and hide. Food and drink are untouched because of the inability to swallow. There is no irritability or tendency to bite in contrast to furious rabies. The paralytic symptoms gradually become more pronounced and the animal lapses into coma and dies 2 to 3 days after the onset of the disease.

In man, the incubation period varies from 10 days to 1 and 2 years, depending on what portion of the body was bitten. Rabies works on the nervous system, and the closer to the brain the germ enters the body, the quicker it begins its deadly work.

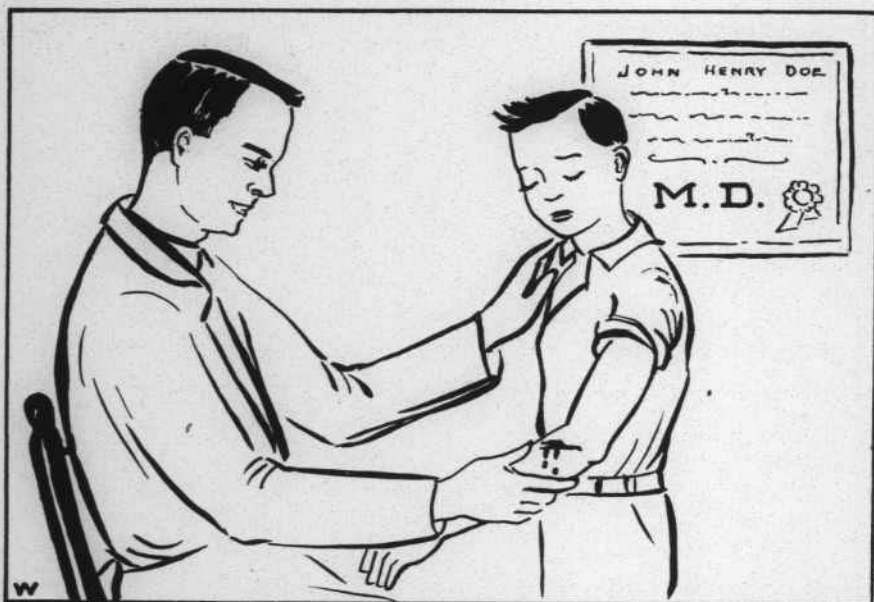
The disease may be divided into three stages: premonitory, excitement and the paralytic stages. The first is characterized by change in sensation around the site of the infection with loss of appetite, inability to sleep, restlessness, irritability and melancholia followed by headache, depression and emaciation.

The excitement stage appears abruptly with uncontrolled agitation bordering on mania. Excessive salivation and convulsive spasms occur. From 24-28 hours after onset the brain is so affected that the swallowing muscles contract whenever the patient attempts to drink, hence the term hydrophobia (water hating). Spasms may be started by the slightest stimulation and may be so severe that death may occur during such an attack.

The paralytic form of the disease occurs in man without signs of nervous irritation.

Every Animal that Bites a Human in Florida Should Be Suspected of Having Rabies

The bite should be thoroughly washed with soap and water and bleeding of the wound encouraged. The individual should consult a physician without delay.



Every dog bite should receive the immediate attention of a physician. Rabies is a disease which attacks the nervous system and the closer to the brain the bite the more quickly does reaction begin. Also, every dog that bites a person should be suspected of having rabies and confined for observation until authorities decide otherwise. Don't underestimate the bite of any animal. See your physician without delay.

If the physician believes treatment necessary, rabies vaccine may be administered. This, basically, is the same as that originally devised by Pasteur 75 years ago. The use of this means of protection is not without its dangers, but compared to the certain death which would result if the person were to develop the disease, the risk is thoroughly justified.

Following a bite, the dog should be secured alive and isolated for a period of 14 days. If the animal has rabies it will usually die in a few days and almost certainly within a two weeks period.

The dog should be under the observation of a veterinarian and not killed unless absolutely necessary. The reason for this is that if the dog is in the early stages of rabies, at which time the saliva

is just as infectious as later in the disease, its brain may not show typical microscopic changes. If the dog is permitted to die of the disease in isolation, the brain is more likely to show the alteration in the brain which will permit the laboratory to prove the condition is present. Also, should the dog be destroyed the brain sections in which the "bodies" concentrate may be damaged and diagnosis is difficult and often impossible.

Prevention and Control

A recent study conducted by the Rockefeller Foundation with the Alabama State Board of Health concluded emphatically "the primary requirement in rabies control is the elimination of wandering and stray dogs, and that vaccination is needed as a supplementary measure." The committee went on to make four specific recommendations:

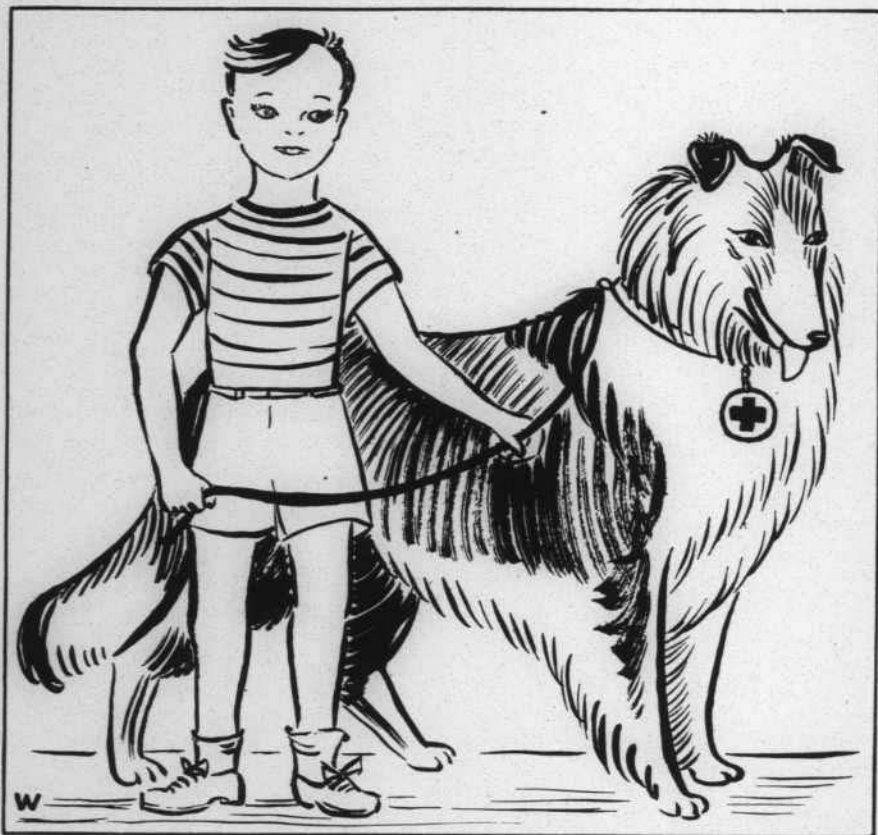
"1. There should be uniform control measures, including the regulation of the entry of dogs and other susceptible animals in the country, and their transfer between the various states.

"2. Animal and human cases should be reported to local and state health authorities.

"3. Every state should require licensing of dogs and licensing should be contingent upon annual vaccination.

"4. Other control measures should be emphasized such as quarantine measures, the establishment of dog pounds, and an educational program aimed at gaining the support and cooperation of the general public."

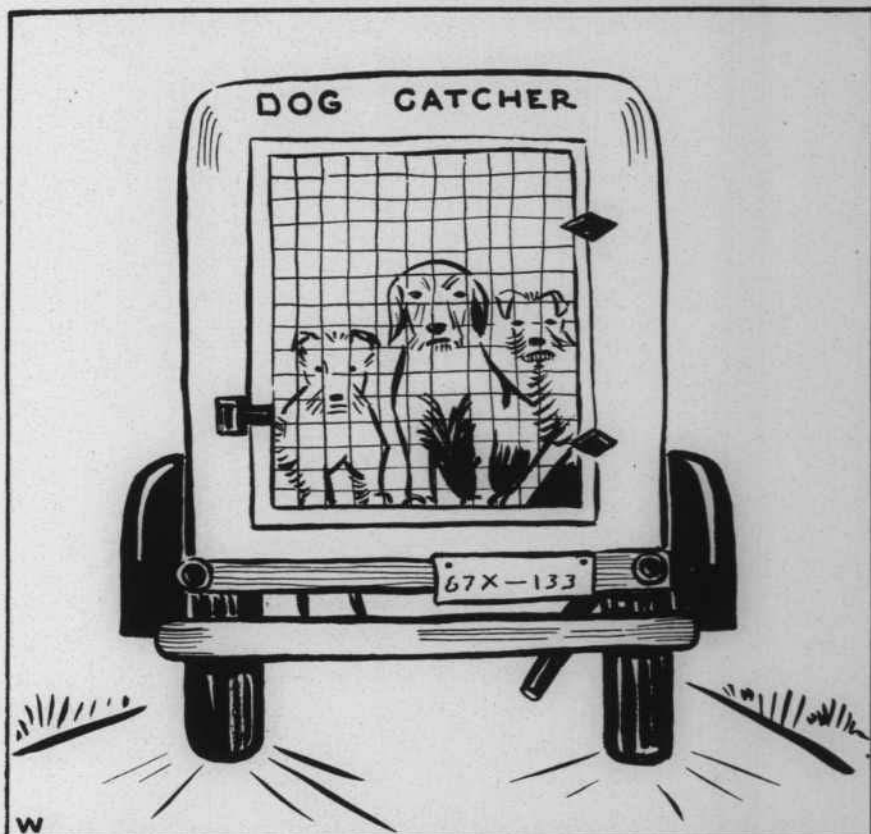
All suspected dogs should be isolated and observed. Whenever rabies appears in a community, strict quarantine of all dogs in the community for 90 days together with the vaccination of all dogs in the area should be carried out. Vaccinated dogs, if tagged, may be allowed at large 30 days after vaccination. It should be noted that puppies (below the age of six months) are particularly susceptible and should be quarantined until the area is declared free of the disease. Unvaccinated and stray dogs should be picked up promptly. Otherwise the effectiveness of the vaccination program is reduced. If rabies is diagnosed in wild animals, it is necessary to reduce the number of the affected species in the area until the disease disappears.



Of course the young man above loves his dog and from all indications his parents value the animal because it wears around its neck a vaccination tag. Animal vaccination not only protects the animal but the children who play with it. Without vaccination the pet is at the mercy of any rabid animal crossing its path. Should it unknowingly be bitten by a rabid animal, in all probability it would be a child who would receive the first bite from his trusted pet. The vaccination of the family dog protects a valued animal and may even save the life of a child.

Universal Vaccination of Dogs and the Elimination of Stray Animals Provide Rapid Control of Rabies in Any Area

Florida, as this goes to press, has had more cases of animal rabies reported to date this year than ever before in a comparable period of time. The distribution of these cases is shown on the map on page 00. Hillsborough has had the largest number of cases with large incidence reported also in Dade, Duval and Volusia counties. Jefferson, Orange, Polk, Santa Rosa and Escambia counties also reported considerably more cases than usual during the past five years.



Don't feel too badly for the "poor little" dogs peeping from their mobile prison. And don't feel too keenly about the dog catcher. He is a maligned person, but actually he is your friend and a friend of your pet. Stray dogs are not only potential carriers of rabies but may also expose your pet to many other canine diseases.

The following table shows the number of cases which have occurred in Florida in the past five years, and in the first nine months of 1947. Also included is the number of anti-rabies treatments distributed through the State Laboratories during that time. If the present trend continues this year \$8,000 will be spent to supply vaccine for treating a condition which could and should be prevented.

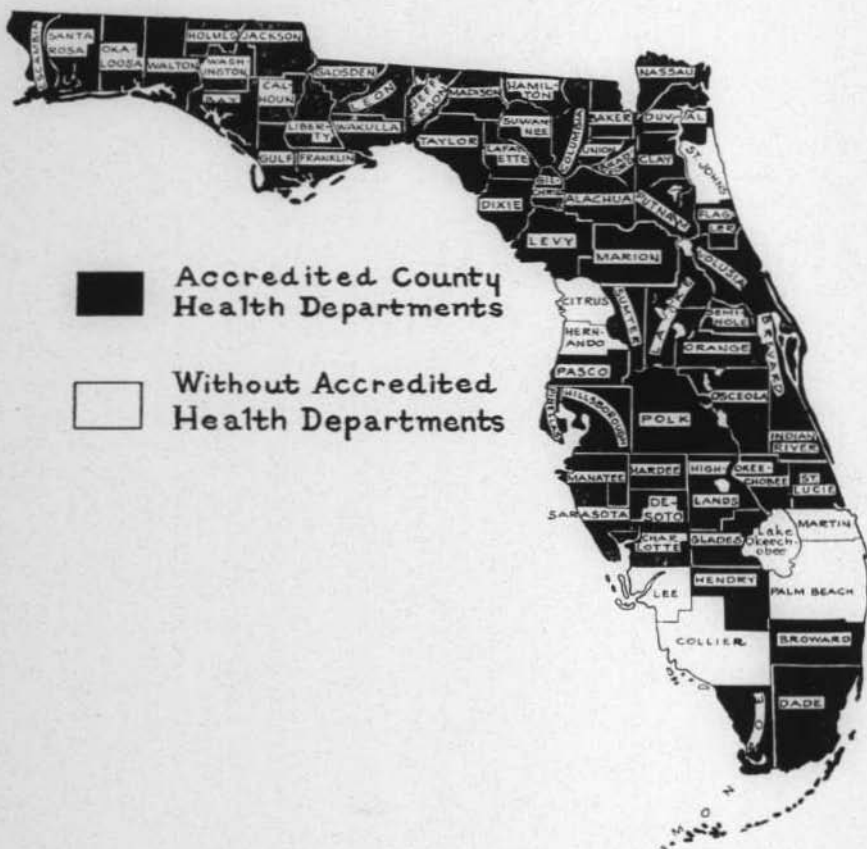
Year	Examined	Positive Heads	Anti-Rabies Treatment
1942	546	211	482
1943	450	120	595
1944	548	171	509
1945	647	209	
1946	574	172	
1947	399*	331*	1000*

*First of October.

Anti-rabies serum is furnished free of charge to all local health departments, which in turn pass it on to private physicians requesting it for indigent distribution. The serum is released only to physicians with the stipulation that it be administered only by a physician. However, in dire emergency physicians may request the serum direct from the State Board of Health Laboratories.

Steps to combat the problem of rabies were taken by the Florida Association of Veterinarians who introduced a bill into the recent legislature, incorporating the control measures mentioned above. The need for further legislation to support a drive against the current condition still exists.

STATE OF FLORIDA





DR. LOWELL S. SELLING.

Consultant on Mental Health

A native of Michigan, Dr. Selling was director of the psychiatric clinic of the Records Court in Detroit for many years. Earlier, he was active in child guidance at the Institute for Juvenile Research, Chicago. Private practice held his interest just prior to his coming to Florida. Dr. Selling is the author of many authoritative books on mental hygiene, one of which "Men Against Madness" has been reprinted in a number of foreign languages. Others are "Studies of the Problem Driver"; "Psychology of Diet and Nutrition" and "Diagnostic Criminology." He holds numerous degrees but his M.S. and M.D., Degrees were received from New York University, his Master of Science in Public Health and Doctorate in public health were earned at the University of Michigan. Degrees such as Master of Arts and Doctor of Philosophy were added at Columbia University.

DR. JOHN MCDONALD.

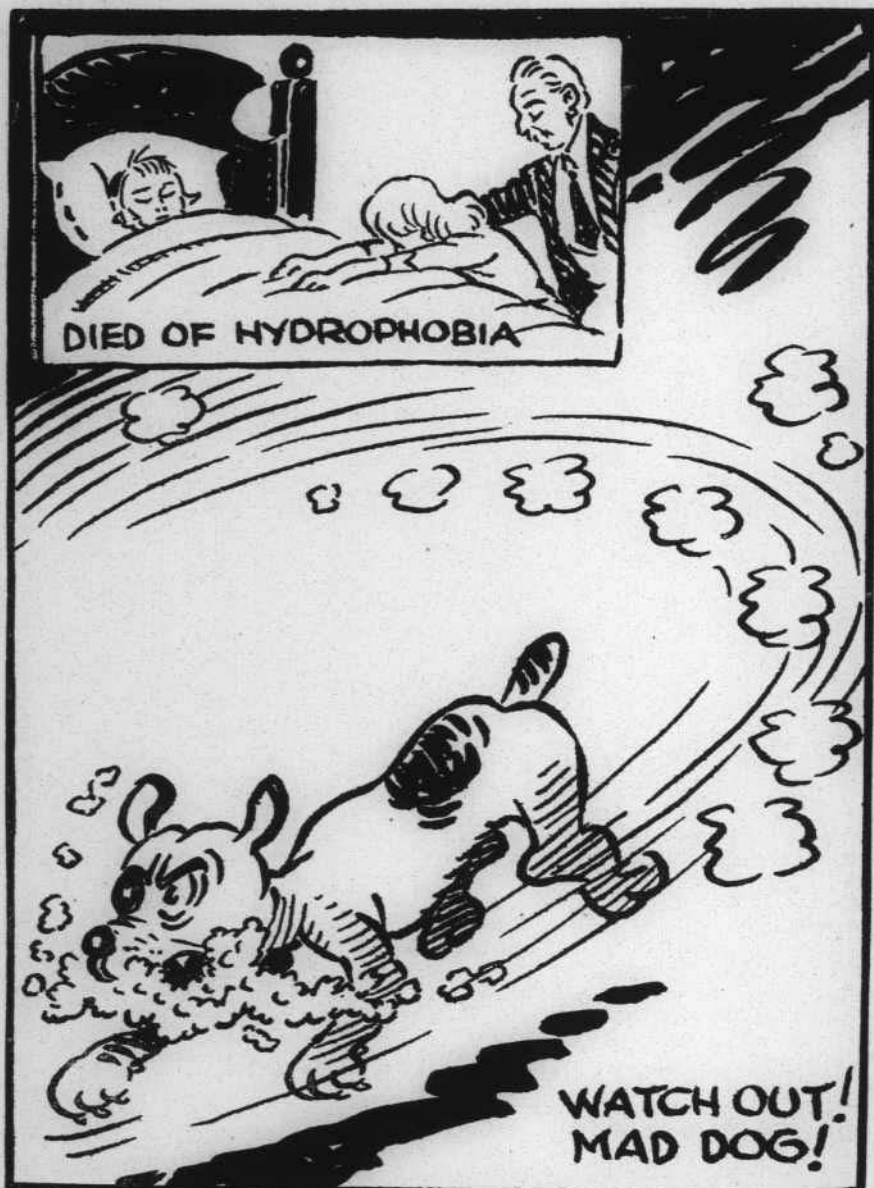
Director, Division of Industrial Hygiene

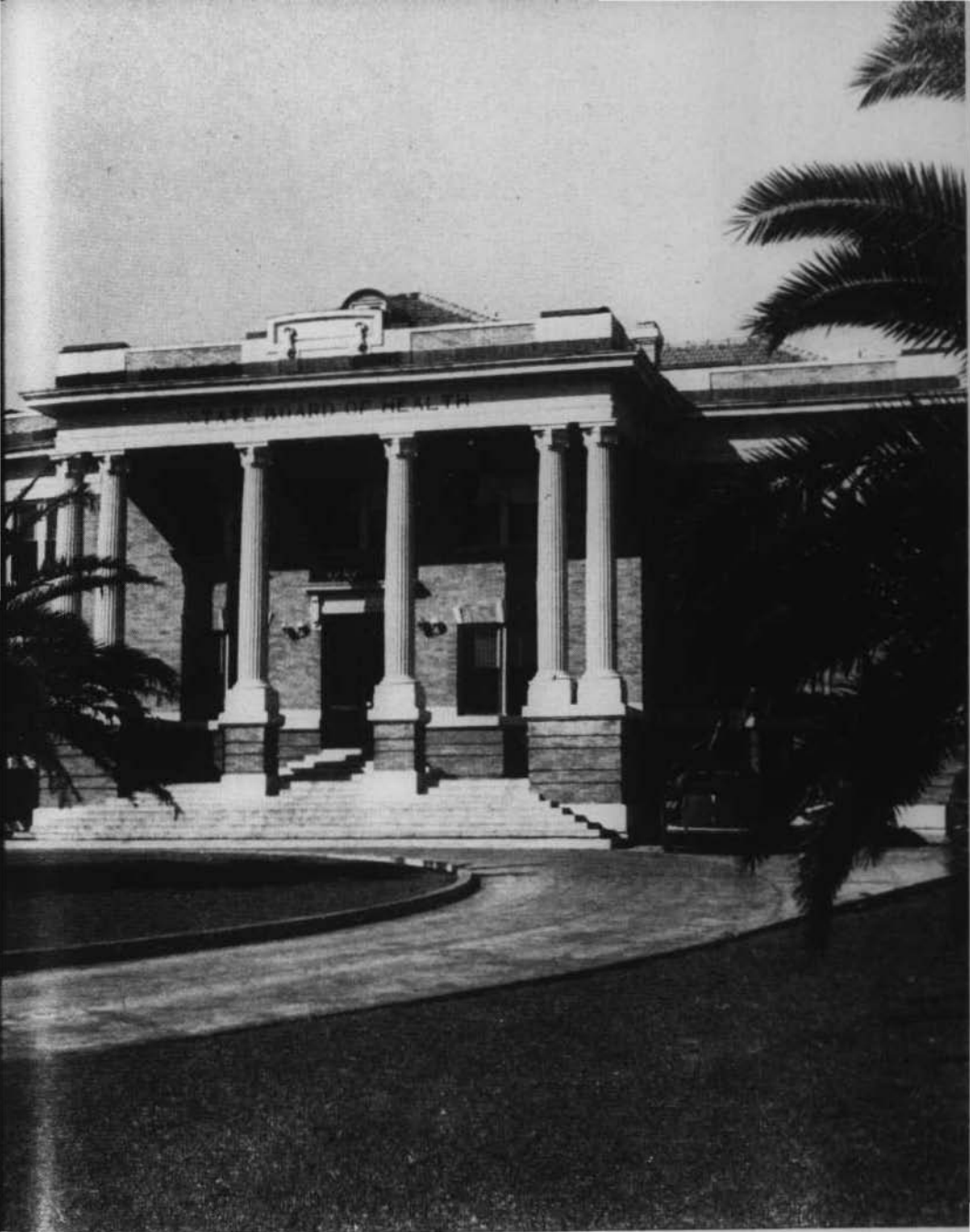
Hailing from our neighbor to the North, Dr. McDonald graduated from the Faculty of Medicine, University of Toronto and went immediately into his country's Army Medical Corp with overseas duty in China, England and France. His internships were served in Duluth, Minnesota, Gary, Indiana and London, England, and his Diploma of Public Health was earned at the University of Cambridge with graduate work later in London and New York City. Dr. McDonald has been in industrial work for many years and for the past 10 years was director of the medical work in occupational diseases in the Baltimore Health Department. He came to Florida last February.



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Florida **HEALTH NOTES**

PUBLISHED BY THE FLORIDA STATE BOARD OF HEALTH
JACKSONVILLE - DECEMBER, 1947 - VOL. 39 - No. 12

TUBERCULOSIS CONTROL

The State Board of Health

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Florida **HEALTH NOTES**

ESTABLISHED 1890

TUBERCULOSIS CONTROL

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Technician Dorothy Fulton is shown handling an x-ray-ee early in the Miami survey. Miss Fulton has worked steadily at the Dade county court house location and has averaged x-raying more than 700 persons daily. (Photo by a Miami newspaper)

TUBERCULOSIS CONTROL

By: DR. C. M. SHARP, *Director*
Bureau of Tuberculosis Control
Florida State Board of Health

Every person in Florida interested in the control of tuberculosis has a golden opportunity to benefit from an intensive program to find early tuberculosis and eventually eradicate this disease.

During the war years tremendous emphasis was placed by national radio networks, local advertising and other media of mass information upon patriotic slogans and campaigns such as the purchase of war bonds and other worthy causes related to the war effort. This was not a casual production of slogans nor an increase in effort directly laid to the war; it was the work of some of the best brains in the advertising field, who pooled their efforts into the formation of the War Advertising Council.

With the cessation of hostilities, the Council was bombarded with requests from groups wanting it to keep its organization and functions intact. Many organizations wanted the same type of service in peacetime which was available during the war. Accordingly, the War Advertising Council dropped "War" from its title and embarked upon a peacetime program of public service. It was felt, however, that public health problems were not only of major importance, but well suited to its type of activity. Also, the Council was immediately besieged with requests for campaigns on many and various phases of public health. Therefore, after an intensive investigation of the means at hand, it was agreed that more good could be accomplished by an intensive campaign against tuberculosis than any other public health problem.

Therefore, beginning in January, 1948, an intensive advertising campaign, to be spread over the entire year, will be launched by the Advertising Council. This program will be sponsored by the National Tuberculosis Association and much of the time and efforts of some of the leading figures in American advertising will be given to the campaign urging that everyone in this country receive a chest X-ray.

Purpose of the campaign is to find the hidden cases of tuberculosis. The National Tuberculosis Association has budgeted \$50,000 for materials to be prepared by the Council and used by state and local tuberculosis associations. All of the material produced for public use will have the approval of the U. S. Public Health Service.

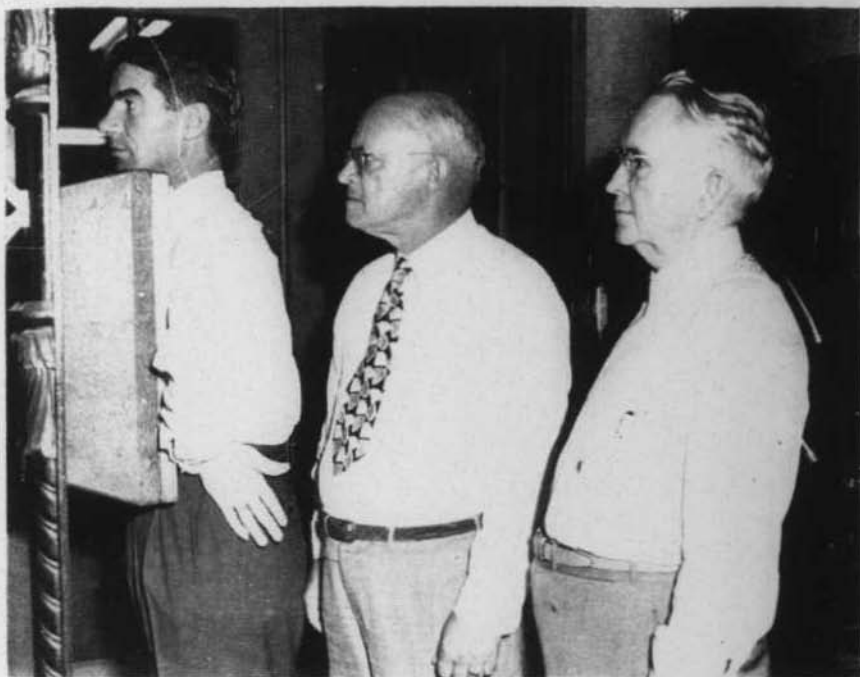


Civic and service groups have played an important part in the mass x-ray program in Dade county. Particularly have members of the Woman's Club and the Parent-Teachers societies been active in registering the x-rayees and assisting generally with the mechanics of the survey. (Photo by RSA)

It is realized that our entire case-finding machinery must consequently be revamped in order to take advantage of this opportunity of providing the many X-rays that will be required.

X-ray facilities for Florida for mass surveys are available to the State Board of Health so that we can probably do around 500,000 X-rays each year, provided everyone takes full advantage of the equipment made available to them.

The State Board of Health has six units now being used for mass X-ray surveys. Two of these units are mobile with their own electrical generating equipment, and two are transportable, dependent upon the local current supply, which can be set up in a central location. In addition, the State Board of Health has provided 70 mm. X-ray equipment to the two large local health departments located in Miami and Tampa. In four of the larger counties, Duval, Dade, Polk, and Orange, the local tuberculosis and health associations have provided their own X-ray facilities where large groups of people can receive free chest X-rays. These units and their services are paid for from the sale of Christmas Seals and, if operated to full capacity, will enable us



On hand early to launch the Miami x-ray survey was Richard Danner, city manager, who was the first to be x-rayed in the city. He is followed by city commissioners Fred Hosea and James Dunn. (Photo by a Miami newspaper)

to take an additional 300,000 X-rays a year provided again, that the public takes full advantage of them.

Naturally, with a National campaign such as we anticipate there will be a much greater turnout of people to be x-rayed than at any other time in the history of the anti-tuberculosis movement. However, it is felt that in addition to an intensified national drive, information made available to the radio and press through local tuberculosis associations and local health departments, will produce an increased local response.

The State Board of Health's budget is entirely inadequate to meet this campaign alone and unaided. However, it is the opinion of this Bureau that if the agencies primarily interested in tuberculosis control (the State Board of Health and the Florida Tuberculosis and Health Association), coordinate their efforts in an attempt to find the hidden, unknown cases of tuberculosis, the control program in Florida will move forward. The latter organization is also in entire accord with this thought.

The state tuberculosis hospitals are operated by the Tuberculosis Board and are not under the State Board of Health, but the relationship between the two is excellent. The working arrangement between the voluntary local tuberculosis associations is entirely independent of the State Board of Health or any other agency, yet we have relied upon them to a large extent for the handling of publicity for the X-ray survey campaigns wherever they have been conducted. For that reason, it is felt that a more intensive coordination of the three agencies having to do with a total tuberculosis control program is desirable. The services of an individual to crystallize this relationship has been secured.

It was recognized that the functions of a Tuberculosis Program Coordinator would be complex, and would require the services of an individual with extreme tact and diplomacy in order to form a closer liaison between the voluntary organization and the local health department.

The mutual understanding between the State Board of Health and the Florida Tuberculosis and Health Association has been splendid, and it was through this understanding that the proposed coordinated program was worked out. This plan has been approved by the State Health Officer, the Executive Committee of the Florida Tuberculosis and Health Association, and the State Tuberculosis Board. The financing and responsibility of such a program will be divided between the three agencies.

The local tuberculosis and health associations, as well as the State Association, have a knowledge of community situations which should be of untold benefit to the health departments in producing the proper response to X-ray surveys.

It has been realized for some time that local communities have not taken full advantage of the mass X-ray facilities made available by the State Board of Health through the local health departments.

This is due, in part, it is felt, to an insufficient awareness of the people to the importance of a routine chest X-ray examination for the detection of early tuberculosis in its most remediable stage. It is also believed that there has not been sufficient liaison between the local tuberculosis and health associations and the local health department.

The place of a voluntary agency such as the Tuberculosis and Health Association in Florida's tuberculosis control program is to "one side and about half a step to the rear" of the official agencies. It is the official agencies which lead the way, which provide the main and central force of the program; the job of the voluntary organization is to supplement, to assist and to make more effective the official programs.

The ways in which a voluntary health agency can supplement the work of the local health department and other official agencies are many and varied. For instance, legislation affecting the tuberculosis program is a vital part of the voluntary agency's work. Unhampered by political pressure, the voluntary group can support or denounce proposed legislation in a manner often impossible for official agencies.

Professional educational material is made available to physicians, nurses and public health workers by the voluntary agency.

Scholarships and institutes, professional training in medicine, public health, rehabilitation and administration are often sponsored.

Institutes, workshops and meetings are held throughout the year to acquaint lay tuberculosis workers with the latest information about the disease and materials for use in its control. The voluntary agency maintains a film library, with white, Negro and Spanish films available for both technical and lay audiences. Working with the schools, teaching units and graded health education materials are introduced; special books, pamphlets, leaflets and other approved educational materials are prepared and used with all races and all age groups. The voluntary agency organizes and administers a Speaker Bureau, and keeps a constant flow of publicity utilizing all media of mass communication to inform large public groups about tuberculosis.

Case-finding in Florida, although carried on primarily by the State Board of Health and the local health units, is a major concern of the voluntary agency. It does much of the promotion for the surveys, assists with the actual survey and follow-up, and is largely responsible for community organization and support. Working with the State Welfare Board and Rehabilitation Service, the voluntary agency helps care for the patient and his family before, during and after sanatorium treatment.

Demonstrated projects, such as clinics, nursing service, maintenance of institutions, fall within the function of the voluntary agency—but only on a temporary basis. As soon as the value of these projects have been proven, their sponsorship and maintenance should be taken over by the proper official agency.

It is our plan to have as small a gap as possible between the voluntary agencies and the official agencies and still allow each to perform effectively. A united effort by all persons, often doing separate jobs, yet always working closely together, is essential to a successful tuberculosis control program.



This picture gives an idea of the long lines that have waited at every x-ray unit in Miami. This one is outside the court house. Shot was taken first day of the campaign. (Photo by a Miami newspaper)

What do we expect to gain from such a program? The obvious result would be a closer working relationship between the cooperating agencies and the related agencies. There should be an improved understanding of tuberculosis by the patient, his family and the community. It is expected that a program of this character will result in an improved community preparation for mass-X-ray services, climaxing in an increased number of X-rays taken in each survey. Through unawareness of the problem, lethargy or lack of interest on the part of the public the units of the State Board of Health are operating at less than one-third of their capacity, and units of local tuberculosis associations are operating at less than one-tenth of their full capacity. They should be operating at 80 per cent to 90 per cent of their capacity.

The coordination of hospitalization, case finding and county government services should also be of considerable assistance to the State Tuberculosis Board, such as the cooperation of the County Commissioner groups who must pay at least one-third of the hospital fees of most patients who are admitted to institutions. This is of vital interest to the State Tuberculosis Board

since it is principally through the case finding efforts of the State Board of Health that patients will be routed to available hospitals operated by the former agency. For that reason, a program such as this has the wholehearted endorsement of that Board as exemplified by its willingness to assist in the payment of the salary of the Tuberculosis Coordinator.

The State Board of Health realizes that the case finding, treatment and follow-up of the disease cannot be divorced. For that reason, these two state agencies have worked harmoniously in their common interests in the control of tuberculosis.

The people of Florida are not taking adequate advantage of hospital facilities. Beds are available for the treatment of tuberculosis which are not being used, and patients who are infectious are leaving state hospitals in large numbers without medical advice. This is due primarily to the lack of education of the adult population concerning the dangers of infecting other people with the tubercle bacillus and the perpetuation of the disease. The presently planned program aims primarily toward making people more aware of the necessity of accepting hospitalization.

The temporary army installations located at Marianna and Tampa, which were taken over by the State Tuberculosis Board, are extremely inadequate, and more construction to provide bright, cheerful hospitals for the treatment of all types of cases is certainly indicated.

By the finding of large numbers of cases of tuberculosis through a program of this type, we could expect to provide more accurate and pertinent information to the public regarding the tuberculosis control problem and the tuberculosis control program leading to better facilities for treatment.

The services of a coordinator will be to plan and promote conferences with the professional personnel of the cooperating and related agencies such as the Department of Public Welfare and the Office of Vocational Rehabilitation of the Department of Education. She will be a representative of both the official and the voluntary agency and it is expected that she will be received by all agencies concerned as an official representative of each.

The purpose of this demonstration plan is to endeavor to show improved results in the total tuberculosis control program of all the agencies involved through coordinated planning and effort. Budgetary curtailment on the part of all participating agencies, however, will not permit the fullest results.

The responsibilities of the Tuberculosis Program Coordinator will be the coordination of all the agencies involved in case-



Roy V. Ott, vice president of the Florida National Bank & Trust Company, being x-rayed on first day of the Miami mass survey at location in the court house. Other civic leaders look on. (Photo by a Miami newspaper)

finding, facilities available for hospitalization, and community education. She will work as a representative of the State Board of Health in the advanced extensive planning for case-finding and publicity with the local groups, and with health field workers who will give her assistance in planning publicity for mass x-ray surveys in local communities. She will also plan for the follow-up of patients with tuberculosis, which should result in the hospitalization of the greater number and in the improved education and understanding of the public with regard to tuberculosis.

This is an entirely new approach to the tuberculosis problem, but it must be recognized by all concerned that we are exploring a new phase of activities in public health. Suggestions or constructive criticism from both official and voluntary agencies will be welcomed. We feel, however, that the program is sound. We believe, too, that the services of the right type of personnel and the willingness to cooperate on the part of local health departments and local tuberculosis associations will undoubtedly result in a great deal of good for the over-all tuberculosis control program.

NEW METHODS (OR NEW PROCEDURES) USED IN CASE FINDING BY THE BUREAU OF TUBERCULOSIS CONTROL, FLORIDA STATE BOARD OF HEALTH

In keeping with the national publicity campaign to be launched by the Advertising Council in January, 1948, this department feels that we should streamline our procedures in order to take complete advantage of the program urging everyone to have a chest X-ray. The first step in this direction, as has already been mentioned, was the appointment of a full-time coordinator to link together the efforts of all those interested in tuberculosis control.

The next step in our reorganization was the overhauling of our own publicity procedures. Besides our health educators, we will endeavor to obtain the aid of a special promotion agency or publicity manager for each survey. The funds for this vitally necessary promotion will be furnished, according to the plan, by the local tuberculosis and health association; the amount of the fund, will be established by multiplying the fixed rate of five cents per picture, by the estimated number of pictures to be taken in the locality. It will be the duty of the publicity agent, with the help of our health educators, to promote and publicize the case-finding program through all established publicity media and in all phases of health education.

Considering that increased amounts of money and effort will be spent to publicize this program, every possible opportunity should be afforded the people in the community to have their chests x-rayed, and every day during the relatively short time allotted for a survey should be utilized. For these reasons we have decided to send all the State Board of Health X-ray units to a given county at one time and to put them on a six-day-week working schedule, instead of five, as has been previously done. In this way, every publicized day will be used to the fullest extent. For example, if one hundred dollars a week, or fourteen dollars a day, is spent for publicity, every day that is not used during that week is a loss of money, effort, and, even more importantly, X-rays. One other advantage in putting all units together in one community is that a more efficient use of personnel, particularly chief technicians, will result.

Another innovation of this streamlined program is the use of "secondary stations," or 14"x17" x-ray equipment, in each community which the mass survey is carried on. This secondary station will require a full-time nurse, clerk and technician, but should insure nearly one hundred per cent follow-up on all suspicious and definite cases of tuberculosis.

Community Organization

When a county wants a mass X-ray survey, the local health department writes to the Bureau of Tuberculosis Control and asks for such a survey. We reply to the health officer that we will be glad to arrange for such a survey in his county, and we ask him to clear with the local medical society and the local tuberculosis and health association. When clearance with all responsible agencies has been secured, we give the county a tentative date and ask them to decide if that will be suitable.

After the date of the survey has been set, the tuberculosis program coordinator goes into the county to meet with the health department and the local tuberculosis and health association. At this time the coordinator acquaints them with the type of service we render and what is required of the local community to put the program over. Thus, the coordinator gives them an over-all picture of the tuberculosis control program, including how much it is costing the State Board of Health to put on the program, and how much is needed for the local community in services and funds to make it a success.

At this time, plans are also made for a mass meeting of community leaders, specially picked people who are sent written invitations to attend. This mass meeting should be held approximately two weeks before the survey is to begin, and organizations which must be included are: the county and city governments, medical society, leading civic clubs, fraternal clubs, board of education, newspaper, and radio representatives, women's clubs, and P.T.A. groups. The local health officer will preside at the meeting and will give the group the over-all picture of the survey. Medical officers from the Bureau of Tuberculosis Control will be present to give a short discussion of the tuberculosis control program in the state, and to tell how this particular county fits into the picture. The executive secretary of the tuberculosis and health association will enter a definite plea for cooperation from all agencies concerned, and will register all community leaders present at this meeting. These registration cards will be put on file and used as the need for assistance arises.

After the community meeting, the planning council, consisting of three or four outstanding community leaders, the health officer, executive secretary of the tuberculosis and health association, and the coordinator, or health educator, is formed. The duty of this planning council is to meet once a week to keep abreast of developments of the survey and to plan ahead.

About six weeks before the survey is to begin, the chief technician will come to the county. With the help of the health educator, executive secretary and health officer, the schedule for all of the units will be made. At the same time, methods of procedure will be discussed and planned by the publicity director, the health educator, and the planning council. If a large city is to be surveyed and block registration is deemed advisable, it will be put into operation at this time. Outlying communities and neighborhood groups throughout the county will also be contacted.

Two or three days before the survey is to begin, X-ray units with the technical staff will move into the county. Primary and secondary stations will be set up, and local personnel hired as full-time clerks will be assigned their stations to work with the units.

The primary stations, the 70 mm. X-ray units, will have a full-time technician, a full-time registration clerk, and two or three voluntary workers to help with the registration.

The secondary station, as explained before, is a 14"x17" follow-up X-ray station and will be staffed by a full-time nurse, full-time survey clerk and full-time technician.

The county should now be well organized and ready for the survey.

Procedure for Mass Survey

Before the actual procedure of the survey is taken up, it might be well to list the personnel directly concerned and the duties connected with their positions.

First, the technician. There will be one technician to each primary station or unit, and a technician at the secondary station. The chief technician and his assistant will not be assigned specific stations; here at definite intervals they will provide relief for the technicians working the other primary stations. The chief technician is responsible for making out the schedules of the units, and keeping those schedules.

The assistant to the chief technician is responsible for distributing supplies, ordering supplies from the main office in Jacksonville, and for sending all completed rolls of 70 mm. film and 14"x17" film back to the home office at the end of each day.

It will be the duty of the technicians at the primary stations to keep a log of the patients x-rayed every day, and to turn that log in to the survey clerk at the end of the day's work.

The survey clerk will work with the nurse at the secondary station, carrying out the instructions of the nurse and keeping such statistics as are needed. The survey clerk should supply the publicity director with daily reports of the number of people x-rayed and the number of cases of tuberculosis found.

The full-time clerks assigned to the various units will oversee the work of the voluntary clerks, and will help with the registration of people being x-rayed. The unit clerks will assist the technician in making out final statistics at the end of the day, and turn them over to the survey clerk for the complete compilation.

The publicity department will have been gradually building up a publicity campaign during the month preceding the survey, a campaign which will reach a peak a few days before the survey begins and maintain that peak throughout the survey. Complete coverage, utilizing all media, will continue throughout the follow-up.

The actual procedure of the case-finding program will run somewhat as follows:

Completed 70 mm. rolls of film will be picked up from the primary stations at the end of each day and sent to the State Board of Health's dark room in Jacksonville for developing. After the films are developed they are sent to the main office, where they are read by a medical officer.

The report of pathology found on the 70 mm. film is sent to the secondary station back in the county where the survey is being held, and all persons found to have suspicious or definite tuberculosis are notified by letter to come to the secondary station for a 14" x 17" follow-up film. All persons with pathology other than tuberculosis, such as heart disease, bronchiectasis, tumors, etc., noted on the 70 mm. film, are called back to the secondary station for questioning and are then referred to their private physician for the treatment of the condition. They are requested to make an appointment with the physician, since a complete record of their case, along with a 70 mm. film, will be sent to the physician designated. All cases with unsatisfactory films are referred to a permanent primary station in a downtown location.



The Dade County Tuberculosis Association's mobile x-ray unit was on hand to do its bit in the mass effort to x-ray every man, woman and child over 15 years of age. It operated mostly in Miami Beach. Here we have Mrs. Frank Coleman, occupational therapist, and Norman V. Hayes, technician, pointing to the broadside informing the public that that particular unit was made possible through the sale of Christmas seals. (Photo by RSA)

When a person reports for a large X-ray at the secondary stations he is interviewed by the nurse, given a tuberculin skin test for differential diagnostic purposes, and has his temperature taken. It is recognized that many chest lesions may simulate tuberculosis but, if the tuberculin skin test is negative, we can be fairly certain that tuberculosis is not a factor in the case. It is, therefore, considered that a tuberculin test is one of our most specific tests in the presence of a negative reaction. Of course, a positive reaction is not so significant since the majority of adults do have positive tuberculin reactions.

The exposed 14"x17" film, accompanied by the interpretation sheet, is sent to Jacksonville, where it is developed and read; this sheet which has been started by the nurse in the secondary station, is then completed. Complete interpretation includes description of the lesion, x-ray diagnosis and recommendations as to further diagnostic procedures and treatment. The large film and two copies of this interpretation form are then sent back to the secondary station.

At the secondary station the film, one copy of the interpretation sheet, and a form letter are sent to the patient's private physician. The second copy of the interpretation form is forwarded to the local health department where it is put on file. It is understood that the diagnosis of pulmonary tuberculosis can be made only after a thorough clinical, x-ray and laboratory investigation; the private physician is requested to make a definite diagnosis using these means. When he has made his diagnosis he should inform the local health department of his findings so a good central case register of all active pulmonary cases of tuberculosis can be kept.

The final analysis of the survey and its findings is completed in the Jacksonville office. A copy of the final analysis will be sent to the interested cooperating agencies in the local community.

The success of a survey such as this depends entirely upon the cooperation given by the agencies and community organizations involved. A good technical staff and a hard-working organization are of course essential, but they in themselves are of no avail if community cooperation is lacking.

Under this program, a survey is in progress at the present time in Dade County which includes the greater Miami area. This survey has been unusually successful. In the period from October 27 through the date of this writing, November 20, 1947, we have succeeded in examining 55,148 people by the use of five x-ray survey units; three are operated by the State Board of Health, one



According to Dr. T. E. Cato, commissioner of health, Dade County, these two are the main spark in getting the survey moving and most of all, keeping it moving. Miss Frances Moorhead is executive secretary, Dade County Tuberculosis Association, and Dr. G. E. Lacy, assistant county health commissioner. (Photo by RSA)

by the Dade County Health Department, and one by the Dade County Tuberculosis Association. As a result of this survey it is felt that a definite pattern is being established for doing successful surveys in the large cities in Florida where we know the tuberculosis incidence is greatest as exemplified by the findings from these examinations.

Thus far in the Dade County survey 121 cases of definite tuberculosis have been found, 360 cases suspicious of tuberculosis have been discovered, and 222 patients with pathology other than tuberculosis have been uncovered and referred to their private physicians for follow-up.

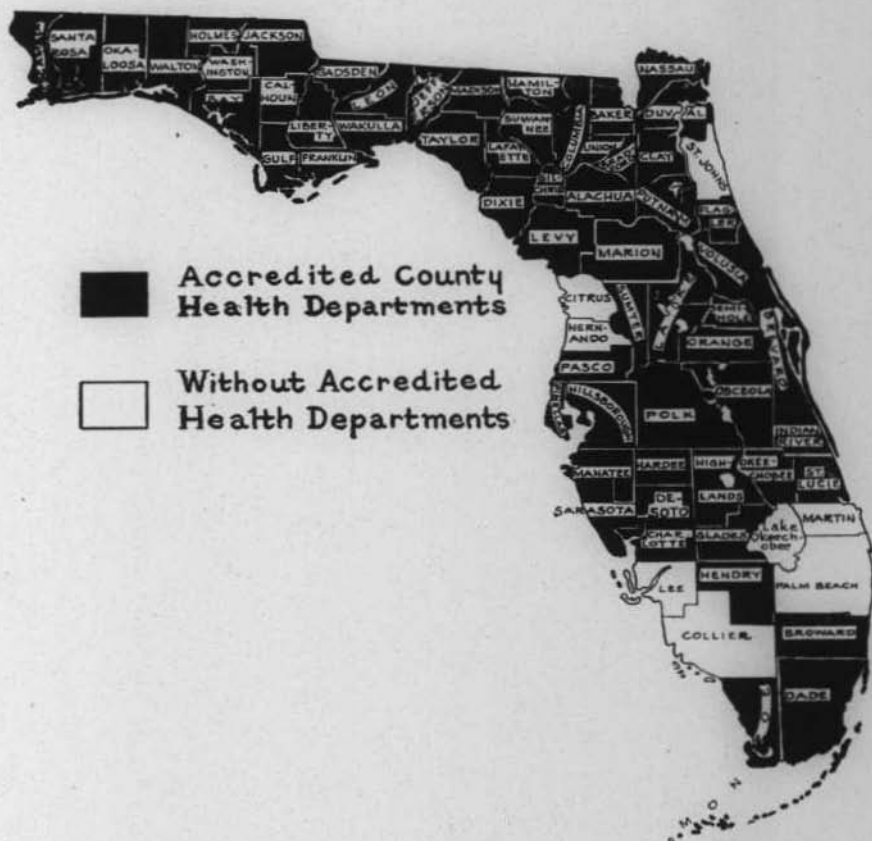
While the primary purpose of a survey of this character is to uncover the unknown tuberculous patient in the community, it is very noteworthy that many conditions other than tuberculosis have been demonstrated. This is exemplified by the number of cases of other pathology found in the survey. Many patients with large tumor masses have been found. A large number of patients with heart disease, and a number of other chest conditions such as bronchiectasis, pneumonitis, etc., have been brought to light and referred to their private physicians for the necessary follow-up. Of course, from one 70 mm. film it is impossible to make a diagnosis of cancer, but one may certainly gather a lead from a survey of this character and refer the patient to a private physician or to a clinic for the necessary attention and for differential diagnostic purposes. It can be truthfully stated that with these mass x-ray surveys we have a potentially valuable tumor detection clinic if adequate follow-up is made on the patients showing tumor pathology.

The exact number of cases found would be impossible to state at this time since an analysis of the complete survey has not been made, but it is expected that an analysis will be available setting forth all types of the pathology that has been found.

With the approval of the Dade County Medical Society a Secondary Station has been established where large film X-rays are taken on all those found to have definite or suspicious tuberculous pathology on the 70 mm. film. The large film along with the complete clinical work-up is sent to the physician of the patient's choice, who does the necessary follow-up.

Our anticipated goal of 100,000 x-rays during the recent survey in Miami in all probability will be reached. We, therefore, feel that an awareness of the tuberculosis problem is definitely being created in the Miami area which should be the beginning of a better tuberculosis program for the State of Florida.

STATE OF FLORIDA



**TABLE OF X-RAY SURVEY ACTIVITIES
STATE BOARD OF HEALTH MOBILE UNITS—1947**

COUNTY	DATES OF SURVEY	No. Films Taken	No. Definite Tuberculosis	No. Susp.	No. Other Pathology
ALACHUA	January 28, thru March 7, 1947	10,239	12	41	43
ALACHUA (University of Florida)	February 27, thru March 28, 1947	4,949	1	4	1
BAKER	May 5, thru May 13, 1947	1,208	1	4	3
BAY	January 2, thru January 24, 1947	7,625	19	47	35
BAY	October 1, thru October 21, 1947	8,461	10	38	22
BRADFORD AND CLAY	January 2, thru January 17, 1947	2,253	11	19	2
BREVARD	August 5, thru August 13, 1947	2,602	5	35	21
CALHOUN	April 10, thru April 17, 1947	1,346	1	10	6
COLLIER	July 22, thru August 1, 1947	1,302	2	18	1
COLUMBIA	September 16, thru September 27, 1947	3,036	6	31	10
DADE (Not completed until Dec. 19)	October 1, thru October 20, 1947	61,821	144	398	253
DIXIE	March 8, thru March 13, 1947	1,034	1	6	6
GADSDEN	August 7, thru September 12, 1947	6,606	10	44	20
GADSDEN (Fla. State Hospital)	May 19, thru June 21, 1947	5,629	91	222	60
FRANKLIN	March 24, thru March 28, 1947	1,460	4	10	20
GLADES	August 26, thru August 27, 1947	442	0	4	2
GULF	March 13, thru April 4, 1947	1,794	5	16	13
HERNANDO	May 20, thru May 29, 1947	869	3	7	1
HIGHLANDS	August 19, thru August 29, 1947	1,624	7	14	2
HOLMES	January 27, thru January 30, 1947	1,534	0	5	5
INDIAN RIVER	November 4, thru November 14, 1947	2,541	8	11	10
JEFFERSON	April 22, thru May 5, 1947	1,911	3	12	5
LAFAYETTE	March 6, thru March 7, 1947	541	1	3	1
LAKE	February 3, thru February 25, 1947	2,126	1	6	3
LEON (Florida A. & M. College)	July 29, thru August 1, 1947	1,451	1	9	2

**TABLE OF X-RAY SURVEY ACTIVITIES
STATE BOARD OF HEALTH MOBILE UNITS—1947**

COUNTY	DATES OF SURVEY	No. Films Taken	No. Definite Tuberculosis	No. Susp.	No. Other Pathology
LEON	August 4, thru				
(FSCW)	August 11, 1947	697	1	4	0
LEVY	June 17, thru				
	June 20, 1947	743	5	14	4
LIBERTY	May 26, thru				
	May 29, 1947	818	3	5	3
MADISON	February 3, thru				
	February 12, 1947	3,039	3	16	21
MARION	June 24, thru				
	July 11, 1947	6,159	12	60	21
MARTIN	June 12, thru				
	June 25, 1947	2,314	6	42	12
MONROE	June 30, thru				
	July 18, 1947	4,223	3	29	4
NASSAU	May 15, thru				
	May 26, 1947	2,443	5	22	9
OKALOOSA	January 13, thru				
	January 26, 1947	1,020	3	8	1
OSCEOLA	July 29, thru				
	August 2, 1947	1,632	2	36	8
PASCO	May 12, thru				
	May 19, 1947	2,107	12	23	14
FINELLAS	March 11, thru				
	May 9, 1947	14,944	62	182	103
POLK	September 13, thru				
	September 30, 1947	8,317	29	63	28
PUTNAM	January 20, thru				
	January 31, 1947	2,466	5	16	4
SEMINOLE	June 3, thru				
	June 13, 1947	2,862	14	53	20
SUMTER	May 20, thru				
	May 29, 1947	1,055	6	10	4
SUWANNEE	February 21, thru				
	March 5, 1947	1,882	3	9	3
TAYLOR	February 13, thru				
	February 19, 1947	2,837	5	16	6
UNION	May 12, thru				
(Florida State Prison, Raiford)	May 26, 1947	1,578	15	11	8
WAKULLA	March 17, thru				
	March 21, 1947	1,105	1	9	12
WALTON	January 20, thru				
	January 27, 1947	1,066	2	1	4
NAVAL AIR STATIONS					
BANANA RIVER	April 1, thru				
	April 10, 1947	1,994	2	10	3
PENSACOLA	June 25, thru				
	July 25, 1947	4,553	5	44	10
WHITING FIELD	July 14, thru				
	July 18, 1947	1,582	4	7	3
TOTAL		204,840	555	1,704	854

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